Display Monitor Solutions

Waterproof and durable displays are essential in today's commercial and industrial applications. IEI's versatile line of IP 64/65 compliant shock and vibration resistant industrial displays are designed specifically to endure the rigorous demands of modern commerce and industrial environments. These displays are easily integrated into automation applications, ATM machines and human machine interfaces.

A. Heavy Industrial Monitors

SRM Series
800nits / 1000nits sunlight readable display monitor

DM Series
Industrial display monitor

TDM Series
-30°C~70°C wide temperature display monitorr

LCD-KIT Series
Open frame display monitor

B. Light Industrial Monitors

AFL-xxM Series
AFOLUX touch monitor

1. IP 64 Front Panel Compliant
2. 5 Video Inputs
3. Picture in Picture Function
4. Ambient Light Sensor
5. Remote Control for OSD
6. Built-in speakers

A. Heavy Industrial Monitors

Product Line		DM-series	TDM-series	SRM-series	LCD-kits series	Touch Screen
		Industrial Display Monitor	-30ºC~70ºC wide operating Temperature for extreme climate conditions	Sunlight Readable 800 nits /1000 nits	Open frame mechanism easy to fit diverse end application enclosure	Resistive LCD Touch Screen Kit
LCD Panel		Models				
6.5"	640 x 480	DM-65GHS			LCD-KIT65G	T-R065G
8.4"	800 x 600	DM-84GHS			LCD-KIT084G	T-R084G
10.4"	800 x 600	DM-104GHS			LCD-KIT104G	T-R104G
12.1"	800 x 600	DM-121GS		SRM-121GS/SRM-KIT121G	LCD-KIT121G	T-R121G
	1024 x 768	DM-121GXS	TDM-121GMS	SRM-121XA/SRM-KIT121XA	LCD-KIT121GX	
15"	1024 x 768	DM-150GS	TDM-150GMS	SRM-150GS/SRM-KIT150G	LCD-KIT150G	T-R150G
17"	1280 x 1024	DM-170GS			LCD-KIT170G	T-R170G
19"	1280 x 1024	DM-190GS			LCD-KIT190G	T-R190G

B. Light Industrial Monitors

Product Lines \ LCD Size	Wide 7"	8.4"	10.4"	12.1"	15"	Wide 15"	17"	19"	Wide 19"
	800x 480	800 x 600	800x 600	1024 x 768	1024 x 768	1366 x 768	1280 x 1024	1280 x 1024	1440 x 900
AFOLUX Touch monitor	AFL-07M	AFL-08M	AFL-10M	AFL-12M	AFL-15M(E)	AFL-W15M	AFL-17M	AFL-19M	AFL-W19M

IEI SmartOSD — Software OSD for IEI LCD Monitors

IEI smartOSD is an intelligent and easy to use proprietary On-Screen-Display (OSD) for IEI display monitors. The smartOSD allows remote, software-based adjustment of screen settings.The smartOSD works over a standard DVI or VGA cable.

Directly controls IEI display device through standard video cables !

Remote System

Various Remote Management Functions
- EDID Reading
- Image/Color/Display Setting
- Power Management
- OSD Lock/Unlock
- PIP Control

VGA cable

VESA DDC / CI Protocol

DVI cable

IEI LCD Monitor

IEI Displays Only!

AFOLUX
AFOLUX Touch Monitor

SRM
Sunlight Readable Monitor

TDM
Wide Temperature Monitor

LCD Kit

DM
Industrial Display Monitor

Features
- Excellent performance and flexibility over hardware OSD
- Low cost implementation for existing monitors
- No limitations to distance
- Normal video cable (VGA/DVI) connection only

Overcome Operation Obstacles

Distance, location and multiple display units no longer present any obstacles when controlling the monitors with the smartOSD.

Multiple Control Displays

Untouchable Location

Remote Control

VNC/PC Anywhere

Remote System

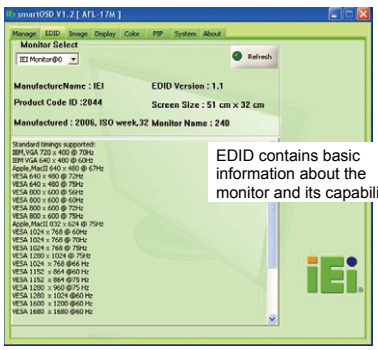
Local System

100% Compatible With VESA DDC/CI Protocol

IEI LCD monitors are implemented with the VESA DDC/CI protocol and the standard VESA Monitor Control Command Set (MCCS). Compliance software for designing displays compatible with VESA's DDC/CI and MCCS standards are easily modified and applied in other application programs.

Various Remote Management Functions

1.EDID


smartOSD V1.2 [AFL-17M]
Monitor Select
ManufacturName : IEI
EDID Version : 1.1
Product Code ID :2044
Screen Size : 51 cm x 32 cm
Manufactured : 2006, ISO week,32
Monitor Name : 240

EDID contains basic information about the monitor and its capabilities

2.Image Setting

Brightness
Contrast
Sharpness

3.Display Setting

Phase
Clock

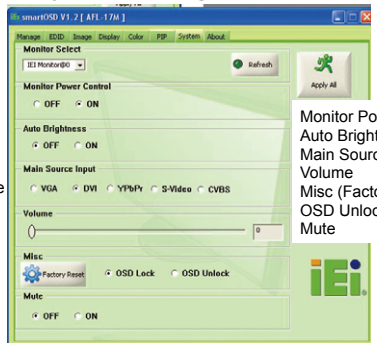
4.Color Setting

User Red Gain
User Green Gain
User Blue Gain
Color Temperature
Gamma

5. Picture in Picture Setting

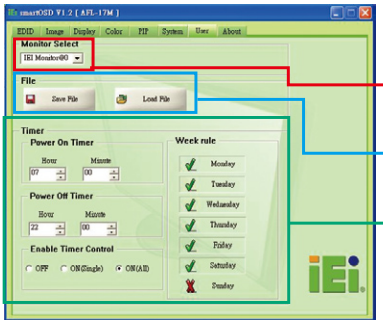
PIP On/Off
PIP Input Source
PIP Size

6. System Setting



Monitor Power Control
Auto Brightness
Main Source Input
Volume
Misc (Factory Reset/OSD Lock/ OSD Unlock)
Mute

7.Monitor Power Management and File Saving



Monitor Select
Selects the monitor unit for which the system parameters will be adjusted

Settings Saving
Save the referred settings of all the OSD functions as .dat files and load the settings

Power Management
Setting the monitor power on/off by time and week

Valuable for Project Base

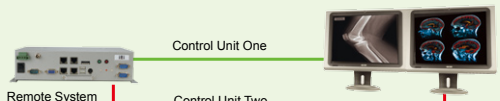
The smartOSD can be very useful in many projects:

(1) Easy Configuration of Multiple Monitors

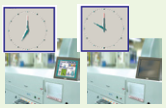
(2) Fast Configuration of Multiple Monitors

Unlimited smartOSD setting configurations can be stored in the memory thereby enabling you to change or choose between memorized configuration modes more quickly.

(3)Smart Power Management



Supermarket Daily Product Promotion
Different memorized settings enable you to easily configure your screen according to the promotion goods to deliver the greatest image to the viewers.



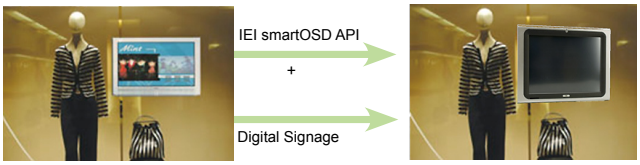
LCD monitor automatically turns on at 7 a.m. and turns off at 10 p.m. from Sunday to Monday

Modifiable for Customization Service

IEI OSD software is based on the VESA protocol standards and can be customized through a command library using customer defined MSSC commands. This programming feature supports easier software development.

MSSC Command List

Codes	VCP Code Names	Codes	VCP Code Names
10h	Brightness	0eh	Clock
12h	Contrast	3eh	Phase
14h	Select color temperature	8ch	Sharpness
16h	Red Video Gain	60h	Main Source
18h	Green Video Gain	62h	Volume



LCD monitor and system automatically turns on at 8 a.m.

LCD monitor and system automatically turns off at 12 p.m.

Outdoor Digital Signage Power Management

Other Features

IP65 Waterproof front panel
IP65 standard is the highest dusty, water and oil proof level in general usage. It absolutely prevents any micro-particle into the system from front panel, and let the system adapting harsh environment.

First Numerical		Second Numerical	
Protection against solid bodies		Protection against liquid	
No Protection	0	0	No Protection
Objects Greater Than 50mm	1	1	Vertically Dripping Water
Objects Greater Than 12mm	2	2	75 - 90° Sprayed water
Objects Greater Than 2.5mm	3	3	30 - 90° Sprayed water
Objects Greater Than 1.0mm	4	4	Water sprayed - low pressure
Dust-Protected	5	5	Water jets - low pressure
Dust-Tight	6	6	Water jets – high pressure - Heavy Seas
		7	Temporary immersion
		8	Indefinite Immersion

Auto Dimming

The SRM and MCM series support auto-dimming. The screen brightness is automatically adjusted to match the ambient light. This causes less strain on people's eyes and reduces energy requirements.

Remote Control

Aremote controller ensuring easy OSD functions configuration.

smart OSD

An intelligent and easy to use proprietary On-Screen-Display (OSD) software for all the IEI LCD monitors to remote control the OSD functions from the systems via VGA/DVI video cable.

Super High Brightess

The SRM monitors are readable in sunlight. The monitors support 800 and 1000 nits brightness. Unlike most sunlight readable monitors, that usually have six backlights, the IEI monitors still only have four backlights. This approach saves power and produces less heat.

Anti-Reflection

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The SRM series has special AR (anti-reflection) surface treatment to prevent reflection, ensuring excellent visibility in daylight conditions.

Wide Temperature

Typical monitors can only be used in environments that have temperatures in the 0°C~50°C range, Extended IEI environmental testing is performed to ensure the TDM series continues to function properly over its entire service life in a wide working temperature range of -30°C to +70°C.

5-in-1 Multiple Video Inputs

Light industry LCD monitors integrated with multiple video inputs through common video connectors including VGA, DVI-D,S-Video, component and BNC/Composite video input interfaces. The 5-in-1 system connects to a wide range of devices and most electronic appliances.(The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA,S-Video, Component and Composite)

PIP Function

Light industry LCD monitors have PIP function enabling a second video/image to be viewed in a small on-screen window

AFOLUX Multimedia Monitors

7"~19" AFOLUX Touch Monitors

with durable 4/5-wire resistive touch screen

- **Touch Screen Features:**
  - Touch system draws your customers in and keeps them involved and quickly control the system just by simple touch.
  - Finger, gloved hand and stylus activation
- **Applications:** POS / KIOSK / ATM machine.

Interactive Digital Signage

4/5-wire resistive touch screen

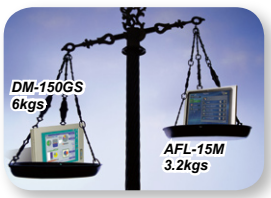
Interactive platform attracts people's attention. It draws your customers in and keeps them involved. Use it for product or service information, directories, check-in services and exhibit details so your customers have the information they need right at their fingertips .Optional USB/ RS-232 Touch Screen Iterface (Dual 2-in-1 USB and RS-232 interface for 7" to 12.1" AFOLUX monitors)

Stylish Design

The clean and refreshingly simple looks of the AFOLUX monitors provide an aesthetic interface for public area applications (e.g. ATMs) and industrial solutions (e.g. operator terminal).

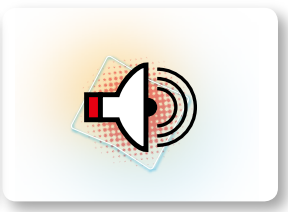
Light Weight Construction

Light weight construction ensures the AFOLUX can be rack mounted, panel mounted and mounted on a VESA stand.



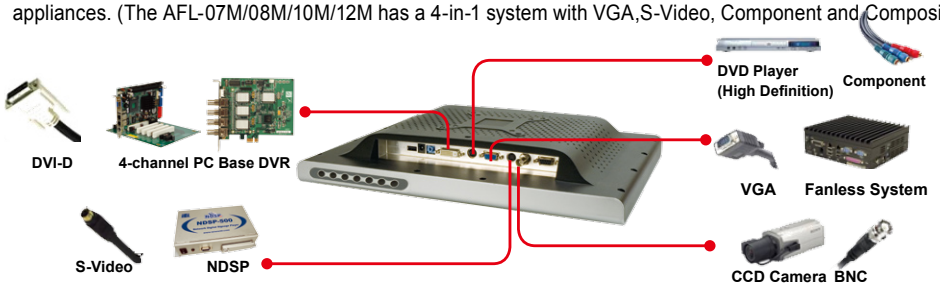
High Quality Audio Built-in

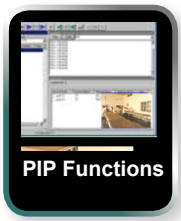
Two built-in speakers deliver dual 1.5/3 watts sound for your multimedia enjoyment.



5 Video Inputs

The AFL-15M/17M/19M have multiple video inputs through common video connectors including VGA, DVI-D, S-Video, component and BNC video input interfaces. The 5-in-1 system connects to a wide range of devices and most electronic appliances. (The AFL-07M/08M/10M/12M has a 4-in-1 system with VGA,S-Video, Component and Composite)

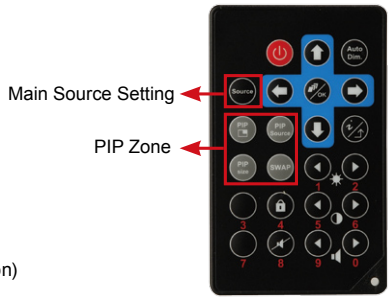




PIP Functions

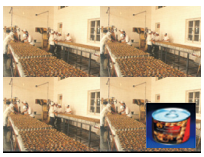
PIP enables a second video/image to be viewed in a small on-screen window. Images from other sources including DVR and DVD devices can also be viewed in the PIP window.

The small onscreen window can be easily resized and moved to a specified onscreen location. Alternatively, “picture-outside-picture” (POP) can be implemented by dividing the screen into two equally sized portions with two different outputs being displayed on either screen.

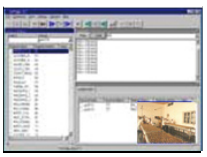


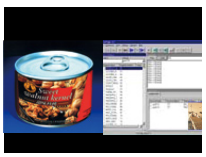
PIP Settings :

- Three sizes including small, medium and large
- Four positions including upper left, lower left, upper right and lower right.
- Independent PIP widow color controls (brightness, contrast, hue and saturation)
- A blend function makes the PIP transparent


Picture In Picture
(Video on Video)

Side by Side
(Video & Video)

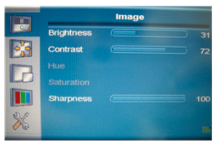

Picture In Picture
(Video on Graphics)


Side by Side
(Video & Graphics)

Main screen and sub screen can’t display BNC/S-Video or VGA/YPbPr inputs at the same time

Full OSD Functions

Integrated OSD functions under the front panel enables convenient monitor configuration. Image, display ,PIP, color and system configurations can all be set with the hidden OSD.



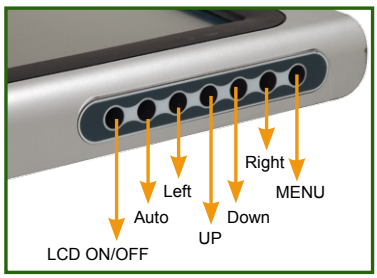
Image

System

Color

PIP

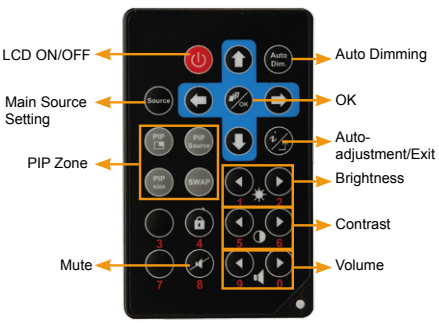
Display



OSD Keypad is designed for AFL-15M/17M/19M

Remote Control for OSD Functions

Hot-keys on the remote control include PIP zone, main source setting, auto-dimming, brightness, contrast and volume. Remote control hot-keys ensure easy configuration of the AFOLUX.



Ambient Light Sensor

The AFOLUX 15M, 17M and 19M models with a mbient light sensor ensures your monitor performs optimally in all lighting conditions.

The ambient ALS can be turned on or off according to the users preference and the operational environment.
Some of the AFL benefits include:

- Reduces cost of operation by reducing the power usage
- Extends backlight life
- Provides comfortable viewing

- Higher Ambient Illuminance

- Lower Ambient Illuminance

ALS is placed on the front side ,where there is an opening for light

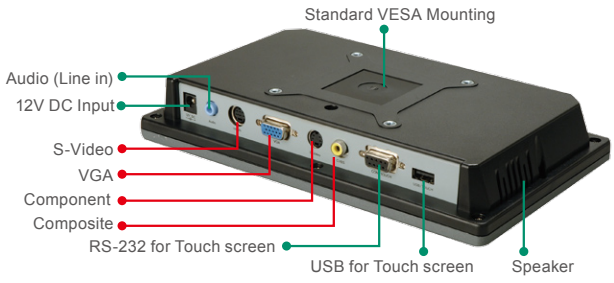
Specifications

Model	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-15ME	AFL-17M	AFL-19M
Display Size	7"	8.4"	10.4"	12.1"	15"		17"	19"
Max Resolution	800 x 480 (WVGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)		1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
Brightness (cd/m²)	350	450	400	450	350	250	300	300
Contrast Ratio	400:1	500:1	500:1	700:1	400:1	600:1	800:1	800:1
LCD Color	262K	262K	16.2M	262K	262K	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.213(H) x 0.213(V)	0.0685(H) x 0.2055(V)	0.240(H) x 0.240(V)	0.297(H) x 0.297(V)		0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
Viewing Angle (H/V)	140°/100°	120°/100°	120°/100°	160°/160°	120°/100°	160°/160°	160°/160°	
Backlight MTBF (Hrs)	30000	50000				40000	50000	
Input Video Signal Connector	1. Composite (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA				1. BNC Connector (NTSC/PAL) 2. YPbPr 3. S-Video 4. VGA 5. DVI			
Audio In	AMP 1.5W + AMP 1.5W (internal speaker)						AMP 3W + AMP 3W (internal speaker)	
Extension	IR Sensor (Remote Control)				1. Ambient Light Sensor 2. IR Sensor (Remote Control)			
Construction Front Panel	ABS and PC Plastic front frame							
Contruction Chassis	Aluminum Chassis							
Power Adapter	36W				60W			
On Screen Display (OSD)	Remote Control for OSD Functions				1. OSD Keypad below the Front Panel 2. Remote Control for OSD Functions			
User's Controls	Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase , Clock,Display Control) PIP (Pip On/Off, Pip Input Select, Pip Size, Pip Position , Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System (Audio, Factory Reset , Information, Input select, Misc)				**OSD Buttons: Power, Left, Up, Down, Right ,Menu** OSD:Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase, Clock,Display Control) PIP (Pip On/Off, Pip Input Select, Pip Size, Pip Position , Pip Color Controls, Blend) Color (Auto Color, Color Tmperature, sRGB) System(Audio, Factory Reset , Information, Input select, Misc)			
Mounting	Panel / Wall mounting (VESA 75 x 75mm)		Panel / Wall mounting (VESA 75 x 75mm / 100 x 100mm)		Wall mounting (VESA 100 x 100mm)			
Dimension (WxHxD) (mm)	226 x 140 x 40.18	233.86 x 183.86 x 41.09	276 x 227 x 50.7	304 x 246 x 49.5	393.06 x 308.06 x 61		428 x 350 x 65	469.94 x 382.46 x 67
Operation Temperature (°C)	0 ~ +50°C							
Net Weight (Kg)	0.88	1.14	1.33	2.12	3.2		5.0	5.6
Front Panel Protection	IP 64 Compliant							

Note: 1. The model name "A" stands for andvanced model with AG/AR tempered glass protection
2. The model name "E" stands for entry level panel with 250 nits

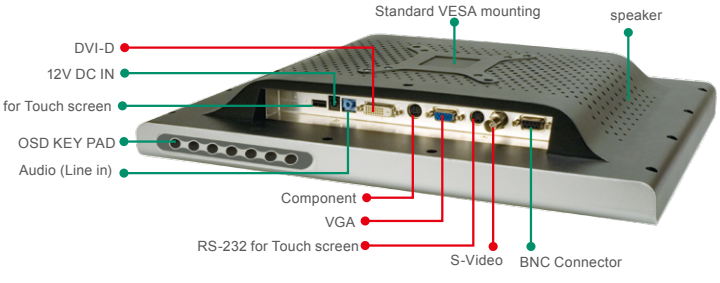
7"~12.1" AFOLUX Monitor

4-in-1 Multiple Video Input System



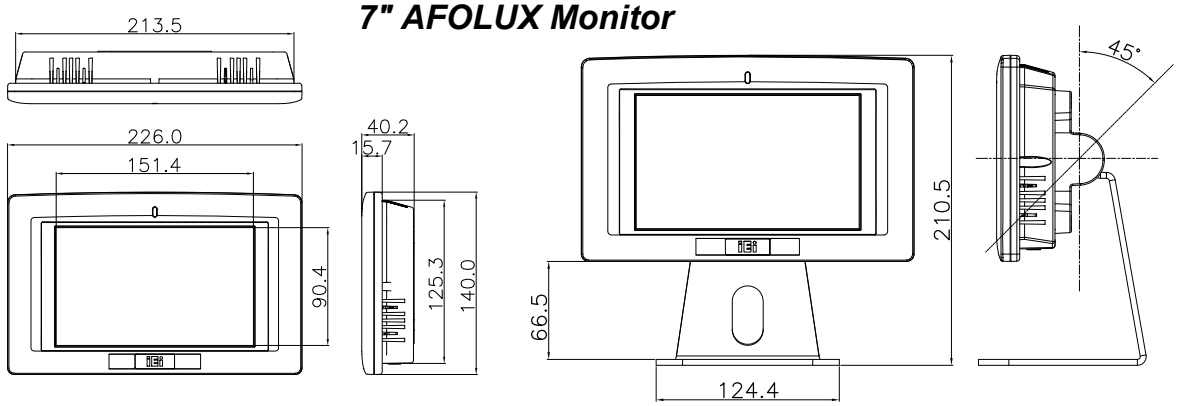
15"~19" AFOLUX Monitor

5-in-1 Multiple Video Input System (DVI-D Added)

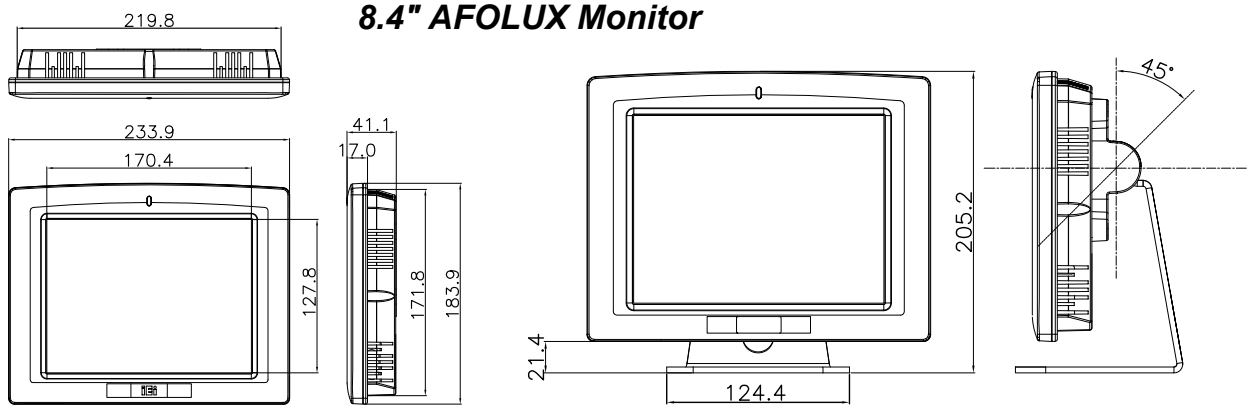


Dimensions (Unit: mm)

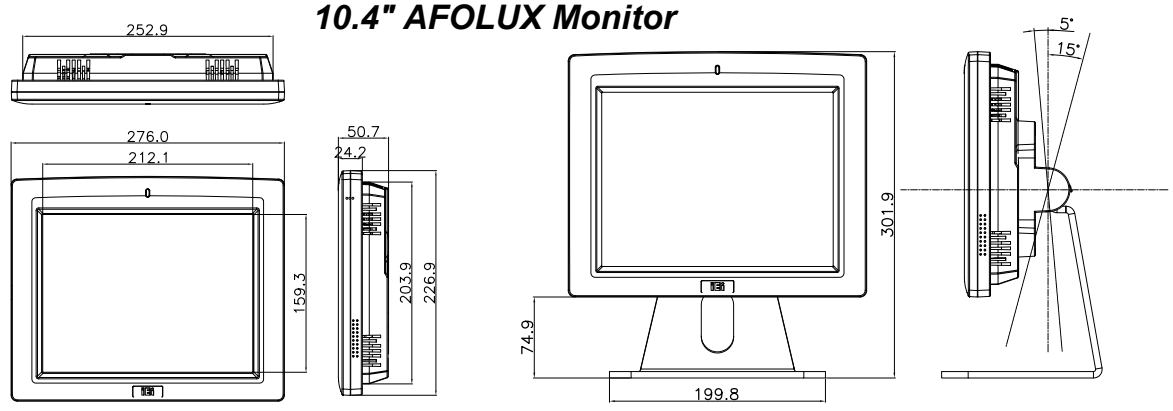
7" AFOLUX Monitor



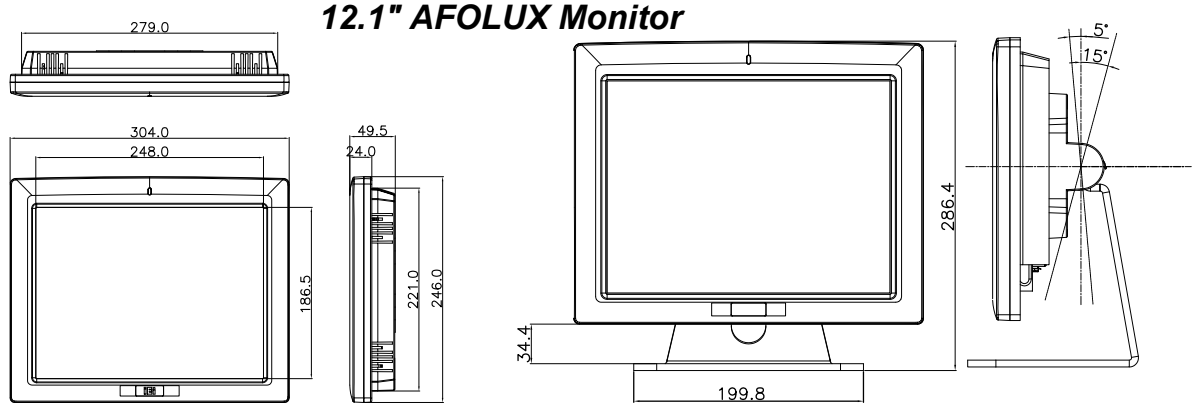
8.4" AFOLUX Monitor



10.4" AFOLUX Monitor

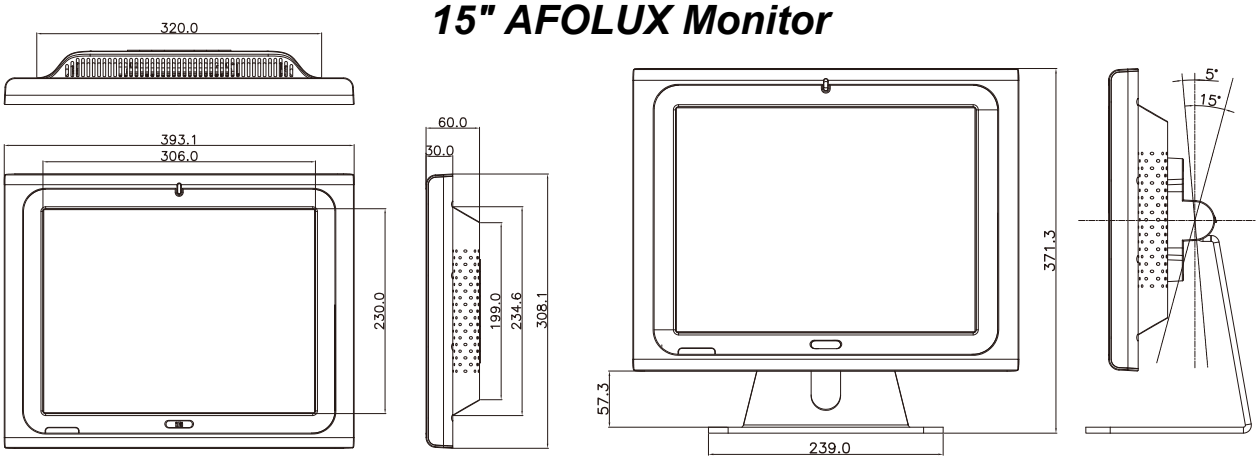


12.1" AFOLUX Monitor

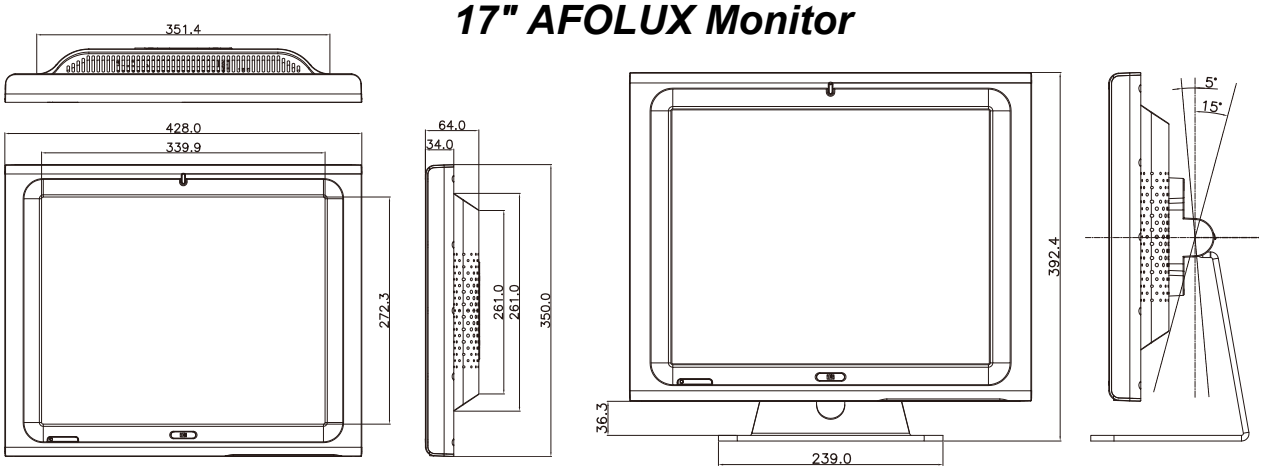


Dimensions (Unit: mm)

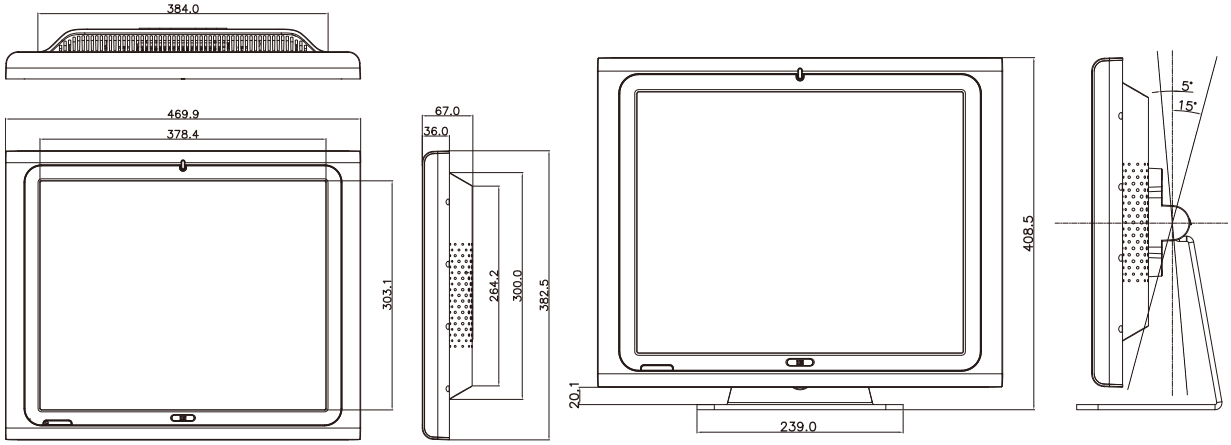
15" AFOLUX Monitor



17" AFOLUX Monitor



19" AFOLUX Monitor



Options

	AFL-07M	AFL-08MH	AFL-10M	AFL-12M	AFL-15M	AFL-17M	AFL-19M
Panel Mounting kits	AFLPK-08		AFLPK-12		AFLPK-15	AFLPK-17	AFLPK-19
Wall Mounting kits	AFLWK-12				AFLWK-19		
Rack Mounting Kits	AFLRK-07	AFLRK-08	AFLRK-10	AFLRK-12	AFLRK-15	AFLRK-17	N/A
LCD Monitor Stand	STAND-A08/STAND-100-RS		STAND-A12/STAND-100-RS		STAND-A19/STAND-B19/STAND-210-R11		
VSTAND	VSTAND-A07	VSTAND-A10		VSTAND-A12	N/A		
DC to DC converter module	IDD-930160-KIT						

Packing List

Item	Part No.	Remark
Power Cord	32000-000002-RS	Length:180cm
VGA Cable	32000-036200-RS	Length:180cm
Audio Cable	32000-036500-RS	Length:180cm
Component Cable	32000-083700-RS	Length:10cm
Component Extend Cable	32000-088100-RS	Length:170cm
DVI Cable	32000-086600-RS	Length:180cm for AFL-15M / 17M / 19M
36W Power Adapter	63000-FSP0361AD101C-RS	for AFL-07M / 08M / 10M / 12M
60W Power Adapter	63000-FSP0601AD101C-RS	for AFL-15M / 17M / 19M
User's Manual CD-ROM	7B000-000087-RS	
Remote Control	7Z000-8T00322ICP01G-RS	
Touch Pen	XTR104-0002-RS	for Touch Screen Models
Touch Screen RS-232 Cable	32000-000098-RS	Length:180cm for Touch Screen Models
Touch screen USB cable	32000-045801-RS	Length: 150cm for touch screen models

Remote Control

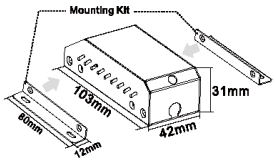
Touch Pen

Component Extend Cable

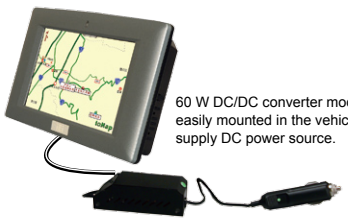
Component Cable

Optional 60W DC/DC Converter Module Spec (P/N:IDD-930160-KIT)

Input Voltage	9~30VDC
Input Current	Max. 8A at 6VDC
Output	12V@5A
Max. Total Output	60W
Performance Characteristics	Noise & ±Ripple:<320mV, Line Regulation: <120mV , Load Regulation: <120mV
Transient toggle rate	250Hz (50% duty ratio)
Transient current step	From 0% to 50% and 50% to 100% of max current
Efficiency	typ. 95% (Vin=12V, 80% of full load)
Dimensions	42mm x 103mm x 31mm
Mounting Kit	12mm x 80mm
Cable Length	180cm
Operating Temperature	-40°C~85°C



IDD-930160-KIT



60 W DC/DC converter module can be easily mounted in the vehicle equipment to supply DC power source.

IDD-930160-KIT(Optional)

Ordering Information

Part NO	Description
AFL-07M/T-R-R11	7" 350cd/m² WVGA LCD monitor, plastic front panel, gray color, with 7" RS-232 and USB touch screen, RoHS
AFL-08MH/T-R-R11	8.4" 450cd/m² SVGA LCD monitor, plastic front panel, gray color, with 8.4" RS-232 and USB touch screen, RoHS
AFL-10M/T-R-R11	10.4" 400cd/m² SVGA LCD monitor, plastic front panel, gray color, with 10.4" RS-232 and USB touch screen, RoHS
AFL-12M/T-R-R11	12.1" 450cd/m² XGA LCD monitor, plastic front panel, gray color, with 12.1" RS-232 and USB touch screen, RoHS
AFL-15M/T-R-R11	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" RS-232 touch screen, RoHS
AFL-15ME/T-R-R11	15" 250cd/m² XGA LCD monitor,plastic front panel,gray color,with 15" RS-232 touch screen, RoHS
AFL-15M-USB/T-R-R11	15" 350cd/m² XGA LCD monitor, plastic front panel, gray color, with 15" USB touch screen, RoHS
AFL-15ME-USB/T-R-R11	15" 250cd/m² XGA LCD monitor,plastic front panel,gray color,with 15" USB touch screen,RoHS
AFL-17M/T-R-R11	17" 300cd/m² SXGA LCD monitor, plastic front panel, gray color,with 17" RS-232 touch screen, RoHS
AFL-17M-USB/T-R-R11	17" 300cd/m² SXGA LCD monitor, plastic front panel, gray color,with 17" USB touch screen, RoHS
AFL-19M/T-R-R11	19" 300cd/m² SXGA LCD monitor, plastic front panel, gray color, with 19" RS-232 touch screen, RoHS
AFL-19M-USB/T-R-R11	19" 300cd/m² SXGA LCD monitor, plastic front panel, gray color, with 19" USB touch screen, RoHS

Note: Dual 2-in-1 USB and RS-232 interface for 7" to 12.1" AFOLUX monitors

AFL-W19M

AFOLUX 19" Wide WXGA+ Touch Monitor

19-inch Wide 16:10
Sophisticated Black High Reflection Surface

smart OSD 1000:1 High Contrast Ratio, 5ms Fast Response Time

Features

- 19” wide screen TFT LCD with resistive touch panel activated by a stylus, finger or gloved hand
- Ambient Light Sensor detects ambient light for automated screen adjustments to optimize viewing.
- Built-in speakers
- RS-232 or USB touch screen panel (Optional)
- 9~36V DC power input for mobile application (Optional)
- VESA 100 compliant for various mounting applications
- IP64 compliant plastic front panel

Software OSD Control (smartOSD)

Convenient OSD Control

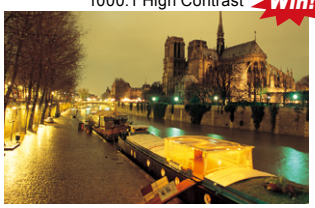
Ambient Light Sensor

The AFOLUX touch monitor has a widescreen 16:10 display, supporting up to 1440x900 (WXGA+) screen resolution. The touch monitor also features high contrast and fast response time. IP64 compliance ensures protection against dust and sprayed water. Supporting both VGA and DVI video inputs makes this monitor ideal for outdoor digital signage and kiosk applications. It is ideal match for the IEI iSignager digital signage player.

1000:1 High Contrast — 1000:1 Super High Contrast ratio offers Greater Legibility

Typical Contrast

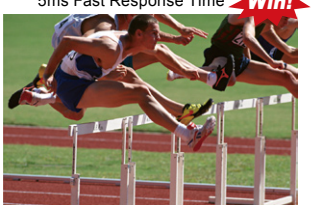
1000:1 High Contrast Win!



5ms Fast Response Time — Fast moving images without any motion blur

Typical Response Time

5ms Fast Response Time Win!



Ambient Light Sensor

Built in the ambient light sensor in front of the panel to automatically detect the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:
- Avoids eye strain by adjusting to the environment.
- Power saving
- Extend lamp lifetime

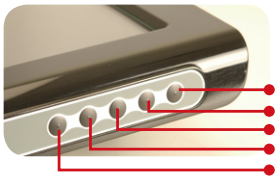
Day:
Higher Ambient Luminance

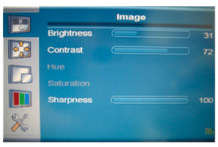
Night:
Lower Ambient Luminance

OSD Control

Intelligently adjusts the screen brightness to match the ambient light in a room, ensuring a comfortable viewing experience. In a dim room, for example, the screen automatically reduces brightness to avoid straining your eyes.

• Keypad





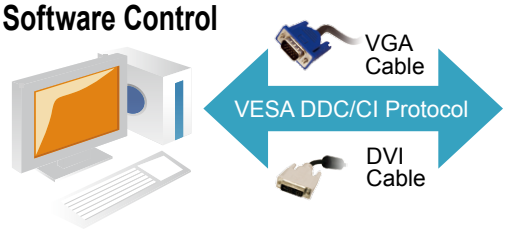
Image

System

Display

Color

• Software Control



Remote Control Monitor Setting from Software

- **EDID Reading**
- **Image/Color/Display Setting**
- **Power Management**
- **OSD Lock/Unlock**

Applications

Interactive digital signage

Digital menu boards in numerous restaurants

Video gaming machines in bars and casinos

Wide Screen Monitor Applications

Dual Display for Better Working Environment

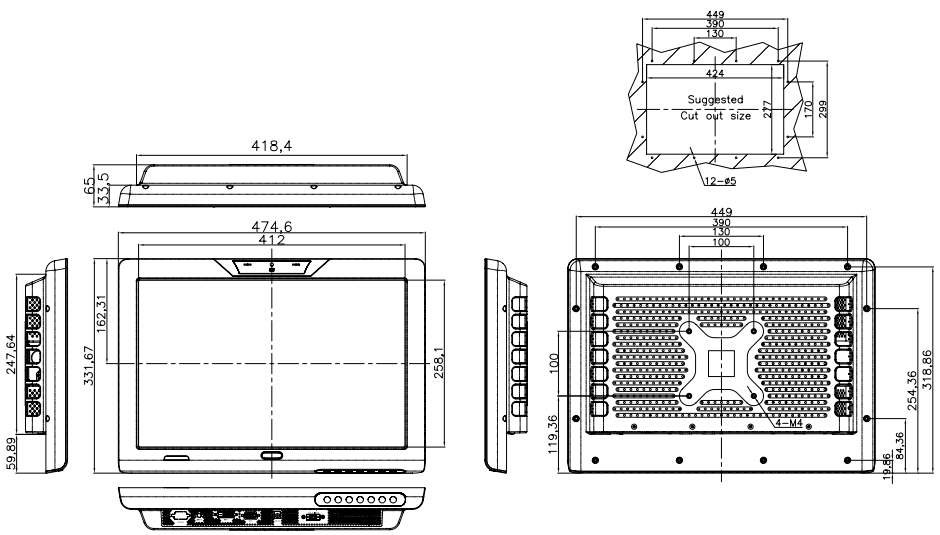
Dual screen technology, suitable for industrial applications, enables one screen be used for operator entries, while other is used as display unit for process data.

ECN-171A

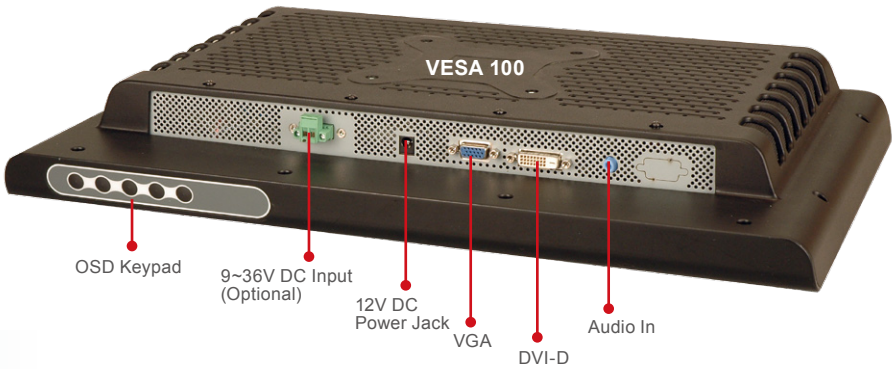
Dual-display embedded system supports up to dual analog monitors at independent or stretched resolutions.

- Intel® 945GME chipset supports socket M CPU up to 34 W TPD
- 7.1 channel HD audio with HDTV output or dual VGA
- One 2.5" hard drive bay and one CompactFlash™ slot
- One PCIe mini card slot and one PCI-104 slot for expansion
- 12 VDC, 9 V~36 VDC input models available

Dimensions (Unit: mm)



Fully Integrated I/O



Specifications

Model Name		AFL-W19M
Display	Screen Size	19" (16:10)
	Display Resolution	1440 x 900 (WXGA+)
	Display Colors	16.7M
	Viewing Angles (H/V)	170° / 160°
	Brightness (cd/m²)	300
	Contrast Ratio	1000:1
	Response Tome (Tr+Tf)	5 ms
	MTBF (Hrs)	50000
Input Connectors	RS-232 for touch (Optional)	1
	USB for touch (Optional)	1
	DVI-D	1
	VGA	1
	12V DC Power Jack	1
	9~36V DC Terminal Block (Optional)	1
	Audio In	1
Speakers		AMP 2W + AMP 2W (Internal Speaker)
Ambient Light Sensor		Yes
Membran Keypad		LCD On/Off, Volume Up/Down, Brightness Up/Down
On Screen Display Functions		Image (Brightness, Contrast ,Sharpness), Display (Auto Adjust, Phase, Clock,Display Control) Color (Auto Color, Color Tmperature, sRGB) System (Audio, Factory Reset , Information, Input select, Misc)
Mounting		VESA 100 mm x 100 mm
Dimensions (W x H x D) (mm)		475 x 332 x 65
Operation Temperature (°C)		0°C ~ 50°C
Net Weight (Kg)		6
Front Panel Protection		IP 64 compliant

Ordering Information

Model		Description
Fiber Glass	AFL-W19M-R10	19" 300cd/m² WXGA+ Widescreen LCD monitor with VGA and DVI-D input, plastic front panel
Touch Screen	AFL-W19M/T-R-R10	19" 300cd/m² WXGA+ Widescreen LCD monitor with VGA and DVI-D input, with 19" RS-232 touch screen, plastic front panel
	AFL-W19M-USB/T-R-R10	19" 300cd/m² WXGA+ Widescreen LCD monitor with VGA and DVI-D input, with 19" USB touch screen, plastic front panel
	AFL-W19MM/T-R-R10	19" 300cd/m² WXGA+ Widescreen LCD monitor with VGA and DVI-D input, 9~36V DC input, with 19" RS-232 touch screen, plastic front panel
	AFL-W19MM-USB/T-R-R10	19" 300cd/m² WXGA+ Widescreen LCD monitor with VGA and DVI-D input, 9~36V DC input, with 19" USB touch creen, plastic front panel

Options

Panel mounting kit	AFLPK-W19B
Wall mounting kit	AFLWK-19
Rack mounting kit	N/A
ARM	ARM-11-RS / ARM-31-RS
Stand	STAND-A19 / STAND-B19 / STAND-210-R11

Packing List

Item	Part No.	Remark
DVI cable	32000-086600-RS	Length: 180cm
VGA cable	32000-036200-RS	Length: 180cm
Audio cable	32000-036500-RS	Length: 180cm
Touch screen RS-232 Cable	32000-000098-RS	Length:180cm for RS-232 touch screen model
Touch screen USB cable	32000-045801-RS	Length:150cm for USB touch screen model
Touch pen		
User's manual CD-ROM		
60W power adapter	63000-FSP0601AD101C-RS	
Power cord	32000-089900-RS	Length: 183cm

Heavy Industrial Display Monitors

To meet your specific needs, IEI offers several display lines (listed below) are available from IEI to fit your versatile monitor needs:

Industrial Display Monitor

The DM series displays are flexible, durable systems that are easily integrated into a wide variety of general-purpose industrial applications including HMI, factory automation and process control.

DM Series Sizes: 6.5” to 19”

800/1000 nits Super High Brightness

Sunlight Readable Monitor

The SRM series is designed to operate in high ambient lighting conditions at 800 nits or 1000 nits of brightness within extended operating temperature ranges and is especially designed for outdoor use under direct or indirect sunlight.

SRM Series Sizes: 12.1" to 15"

-30°C~70°C

Wide Temperature Display Monitor

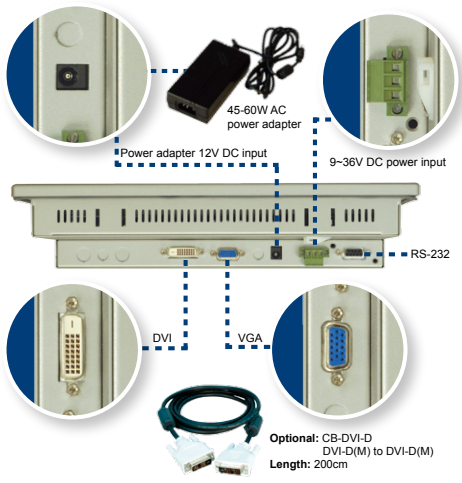
The TDM series offers an extended operational temperature range of -30°C ~ +70°C that can tolerate temperature extremes in harsh operating environment, both indoors and out.

TDM Series Sizes: 12.1" to 15"

General Features

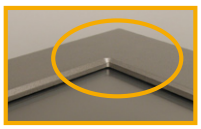
Support analog VGA or DVI input

DM series support both analog VGA and DVI input. DVI (Digital Video Interface) is a replacement for the P&D, Plug & Display, standard, and a step up from the digital-only DFP format for older flat panels. DVI is becoming increasingly popular with video card manufacturers, and most cards purchased include both a VGA and a DVI output port.



IP 65 Waterproof Aluminum front panel

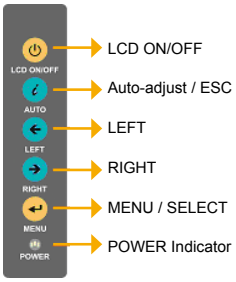
IP65 standard is the highest dusty, water and oil proof level in ground usage, it absolutely prevents any micro-particle into the system from front panel, and let the system adapting harsh environment.



Full OSD Function in the front panel

IEI DM Series with full OSD function in the front panel, users can easily configure all monitor functions by the water proof OSD function keys.When using this OSD which located in the front panel, user can change the brightness of LCD panel and extend the panel life.

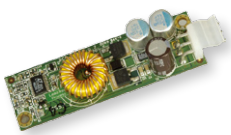
With OSD Disable Function



• OSD lock secures your settings
Pressing left and right buttons eight seconds, the OSD funtions will be locked. Press eight seconds again, the OSD functions will be unlocked.

Mmodels support 9~36V DC power input for mobile application

DM M models support 9~36V DC power input. Factories and mobile environment such as cars and engineer vehicles usually use not only 12V but also 24V DC as power source, 9~36V power input solution could adapt more appliance requirement.

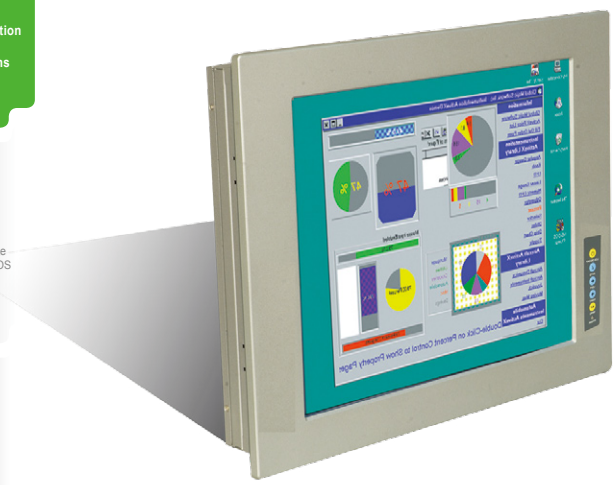


Hi-optical RS-232 interface touch screen

DM series provides RS-232 reserved port for touch screen. IEI DM provides T-R model with high strength Fiber Glass Touch Screen for appliances.

DM Series

6.5”~19” IP 65 industrial monitors, Robust, Shock Resistance and OSD Funcation



Features

1. Aluminum front panel meets IP65 standard for tough working environment
2. Optional RS-232 interface touch screen
3. Robust chassis and retention kit structure for shocking and vibration requirement
4. Over 300cd/m² high brightness and 50000hrs MTFB long lifetime panel
5. Analog VGA interface supports most of general system boards
6. M models support 9~36V DC power input for mobile application

Model	DM-65GHS	DM-84GHS	DM-104GHS	DM-121G/DM-121GXS	DM-150GS	DM-170GS	DM-190GS
LCD Size	6.5”	8.4”	10.4”	12.1”	15”	17”	19”
Input Interface	Analog VGA	Analog VGA	Analog VGA	Analog VGA + DVI-D			
Max Resolution	640 x 480	800 x 600	800 x 600	800 x 600/ 1024 x 768	1024 x 768	1280 x 1024	1280 x 1024
Brightness (cd/m²)	500	400	400	400 / 450	350	300	300
Contrast Ratio	550 : 1	450 : 1	500 : 1	500 : 1 / 700 : 1	400:1	500:1	700:1
Display Color	262K	262K	262K	262K	262K	16.2M	16.2M
Pixel Pitch (mm)	0.207	0.213	0.264	0.3075 / 0.240	0.297	0.264	0.294
Front Frame	Aluminum						
Chassis	Heavy-duty steel	Heavy-duty steel					
View Angle (H/V)	140/120	120/100	120/100	140/110	160/160	120/100	140/130	140/130
Input Voltage	12VDC	12VDC or 9-36VDC					
OSD function	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Smart OSD	Yes						
Mounting	Wall/Arm/Din/ Panel/Rack	Wall/Panel/Rack/Arm (100x100)/Stand					
Color	Silver						
Dimension (W x H x D mm)	183 x 143 x 41	244 x 178 x 49	312 x 242 x 53	340 x 260 x 58	410 x 309 x 55.1	452.0 x 356.0 x 65.2	482 x 399 x 73
Operating Temperature	0~50°C						
Front Panel Protection	IP65						
Net Weight	1 kg	1.8 kgs	3 kgs	3.8 kgs	6 kgs	8.6 kgs	10 kgs
Power Adapter	36W, 63000-FSP0361AD101C-RS			45W, 63000-UP0451E12P81L-RS			

Mounting Kits Information

	DM-65GS	DM-84GS	DM-104GS	DM-121GS	DM-150GS	DM-170GS	DM-190GS
Panel Mount Kits	PK-65M	PK-84M	PK-104M	PK-170M			PK-190M
Wall Mount Kits	WK-065MS-R10	WK-190MS-R10					
Rack Mount Kits	RK-065MS-R10	RK-084MS-R10	RK-104MS-R10	RK-121MS-R10	RK-150MS-R10	RK-170MS-R10	RK-190MS-R10
Din Mount Kits	DK-84MS		N/A				
LCD Monitor Arm	ARM-11				ARM-31		
LCD Monitor Stand	STAND-100-RS				STAND-210-R11		

Packing List

Description	Remark
1 x AC power cable	
1 x VGA cable	
1 x 45W AC power adapter	For DM-121GS / 150GS / 170GS / 190GS series
1 x 36W AC power adapter	For DM-65GHS / 84GHS / 104GHS series
1 x User manual	
1 x Power cable for terminal block	For M model only
1 x Touch screen RS-232 Cable / Touch Pen / Driver CDROM	For T-R model
1 x Touch screen USB Cable / Touch Pen / Driver CDROM	For USB/T-R model

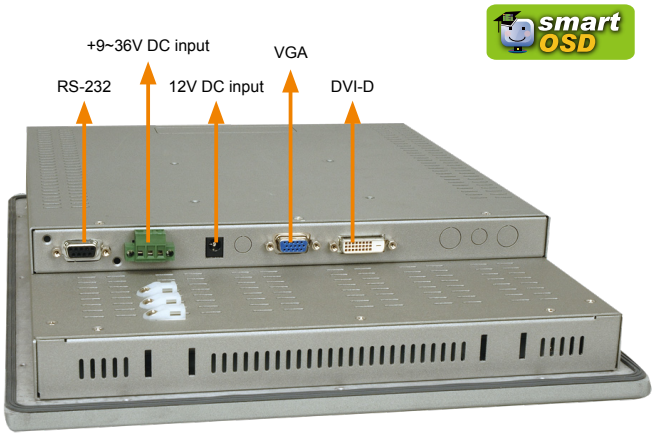
Ordering Information

Part No.		Description
6.5”	DM-65GHS/T-R	6.5" 500cd/m² High luminance VGA LCD monitor with VGA, Aluminum front panel, Silver color, W/8.4" Touch screen, RoHS
8.4”	DM-84GHS-R12/T-R	8.4” 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen,RoHS
	DM-84GHMS-R12/T-R	8.4” 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen, 9~36V DC input, RoHS
10.4	DM-104GHS-R12/T-R	10.4” 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen, RoHS
	DM-104GHMS-R12/T-R	10.4” 400cd/m² High luminance SVGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen, 9~36V DC input,RoHS
12.1”	DM-121GS-R11/T-R	12.1” 400cd/m² SVGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, RoHS
	DM-121GMS-R11/T-R	12.1” 400cd/m² SVGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, 9~36V DC input, RoHS
	DM-121GS-USB-R11/T-R	12.1" 400cd/m² SVGA LCD monitor, Aluminum front panel, Silver color, W/12.1" USB Touch screen, RoHS
	DM-121GMS-USB-R11/T-R	12.1" 400cd/m² SVGA LCD monitor, Aluminum front panel, Silver color, W/12.1" USB Touch screen, 9~36V DC input, RoHS
	DM-121GXS-R11/T-R	12.1” 450cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, RoHS
	DM-121GXMS-R11/T-R	12.1” 450cd/m² XGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen, 9~36V DC input, RoHS
	DM-121GXS-USB-R11/T-R	12.1" 450cd/m² XGA LCD monitor, Aluminum front panel, Silver color,W/12.1" USB Touch screen, RoHS
	DM-121GXMS-USB-R11/T-R	12.1" 450cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W/12.1" USB Touch screen, 9~36V DC input, RoHS
15”	DM-150GS-R11/T-R	15” 350cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, RoHS
	DM-150GMS-R11/T-R	15” 350cd/m² XGA LCD monitor, Aluminum front panel, Silver color, W /Touch screen,9 ~36V DC input, RoHS
	DM-150GS-USB-R11/T-R	15" 350cd/m² XGA LCD monitor,Aluminum front panel, Silver color, W/15" USB Touch screen, RoHS
	DM-150GMS-USB-R11/T-R	15" 350cd/m² XGA LCD monitor,Aluminum front panel, Silver color, W/15" USB Touch screen, 9~36V DC input, RoHS
17”	DM-170GS-R11/T-R	17” 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, RoHS
	DM-170GMS-R11/T-R	17” 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color,W / Touch screen, 9~36V DC input, RoHS
	DM-170GS-USB-R11/T-R	17" 300cd/m² SXGA LCD monitor,Aluminum front panel, Silver color,W/17" USB Touch screen, RoHS
	DM-170GMS-USB-R11/T-R	17" 300cd/m² SXGA LCD monitor,Aluminum front panel, Silver color, W/17" USB Touch screen,9~36V DC input, RoHS
19”	DM-190GS-R11/T-R	19” 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen, RoHS
	DM-190GMS-R11/T-R	19” 300cd/m² SXGA LCD monitor, Aluminum front panel, Silver color, W / Touch screen,9~36V DC input, RoHS
	DM-190GS-USB-R11/T-R	19" 300cd/m² SXGA LCD monitor,Aluminum front panel, Silver color, W/19" USB Touch screen, RoHS
	DM-190GMS-USB-R11/T-R	19" 300cd/m² SXGA LCD monitor,Aluminum front panel, Silver color, W/19" USB Touch screen,9~36V DC input, RoHS

Note: The smartOSD function is only supported by revision 11 models and above

TDM-121/150GMS

12.1”/15” Wide Range Temperature TFT LCD Monitor



Features

1. Wide Operating Temperature: -30ºC~+70ºC
2. 12.1" XGA High Resolution
3. Superior Image
4. M models support 9~36V DC power input for mobile application
5. DVI-D and Analog VGA input interface for comprehensive usage
6. IP 65 Compliant

Wide Temperature | High-Brightness 450cd/m² | XGA 1024X768
IP65 | Wide Viewing Angles | 50,000 Hours Long Lifetime

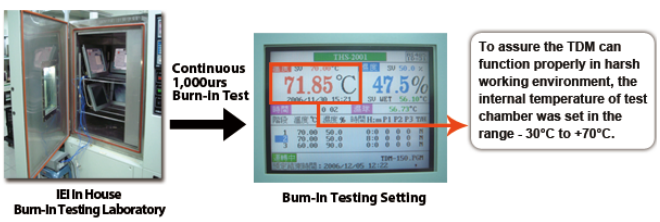
Specifications

Model	TDM-121GMS-R11	TDM-150GMS-R11
LCD Size	12.1”	15”
Max Resolution (H x V)	1024 x 768 (XGA)	
Brightness (cd/m²)	450	
Contrast Ratio	700:1	
Display Color	260k	16M
View Angle (H/V)	160/160	
Pixel Pitch (mm)	0.24	0.297
Operating Temperature	-30°C ~ +70°C	
Storage Temperature	-40°C ~ +80°C	
Lamp Life Time	50000hrs	
Input Interface	Analog VGA , DVI-D	
Front Frame	Aluminum	
Chassis	Heavy-duty Steel	
OSD Function	Yes	
Smart OSD	Yes	
Input Voltage	+9~+36V DC power input	
Mounting	Wall/Panel/Rack/Arm/Stand	
Front Panel Protection	IP65 Compliant	
Net Weight	3.3kgs	6kgs
Dimension (W x H x D mm)	340 x 260 x 58	410 x 309 x 55.1

IEI Strict Design Quality Verification

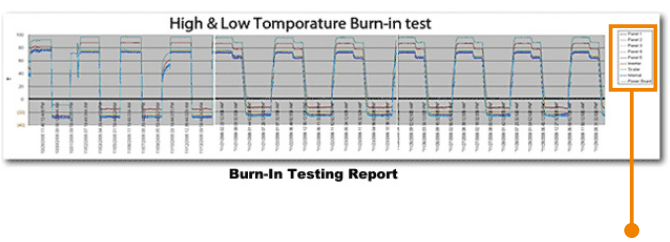
Typical monitors can only be used in environments that have temperatures in the 0°C~50°C range, Extended IEI environmental testing is performed to ensure the TDM series continues to function properly over its entire service life in a wide working temperature range of -30°C to +70° C. After being tested in the -30°C to +70°C temperature range, the TDM series was found to maintain its original luminance.

-30ºC to 70ºC Assurance


Continuous 1,000urs Burn-In Test
71.85 ℃
47.5%
To assure the TDM can function properly in harsh working environment, the internal temperature of test chamber was set in the range - 30°C to +70°C.

IEI In House Burn-In Testing Laboratory

Burn-In Testing Setting



Burn-In Testing Report

Nine thermocouples record all the temperature variations during the burn-in test and the TDM monitor functions during the test.

12.1” XGA Resolution: 1024X768

The TDM-121GMS supports higher resolutions and smaller pixel pitches (0.24mm versus 0.24mm) to deliver great computer displays.

TDM-121GMS

High Brightness: 450cd/m²

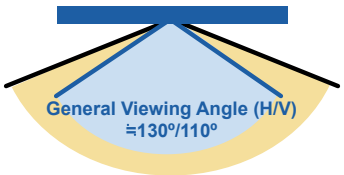
With a luminance of 450 cd/m², the TDM series offer an improvement over the 250 to 300cd/m² luminance typically available with other 12.1-inch TFT LCD modules. The high-brightness feature ensures the screen content is highly visible in all lighting conditions

Normal Brightness

High Brightness

Wide Viewing Angles:160º

Typical small size monitors only support 130º/110º (H/V) viewing angle, but IEI TDM series can support maximum of viewing angle up to 160º/160º (H/V). Wide viewing angles let you not lose the screen brightness and possibly a change of displayed colors, when you view the monitor from the side.



TDM Series Viewing Angle (H/V)
≒160º/160º

TDM Series Viewing Angle

General Viewing Angle

Mounting Kits Information

	TDM-121GMS	TDM-150GMS
Panel Mount Kit	PK-170M	PK-170M
Wall Mount Kit	WK-190MS-R10	WK-190MS-R10
Stand	STAND-100-RS	STAND-200-R11
Arm	ARM-11-RS	ARM-31-RS
Rack Mount Kit	RK-121MS-R10	RK-150MS-R10

Packing List

1 X TDM LCD monitor	1 X Screw set
1 X Power cable for terminal block	1 X Touch Panel RS-232 Cable/Touch Pen/Driver CD-ROM (For T-R model only)
1 X VGA cable	1 X 45W AC power adapter / AC power card (Operating Temperature : 0ºC~ +40ºC)
1 X User manual on CD-ROM	

Ordering Information

Note: The smartOSD function is supported by revision 11 models and above

Part No.	Description
TDM-121GMS-R11/T-R	12.1” 450cd/m² XGA LCD monitor, Aluminum front panel, W/12.1” touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature,RoHS
TDM-121GMS-USB-R11/T-R	12.1” 450cd/m² XGA LCD monitor, Aluminum front panel, W/12.1” USB touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature, RoHS
TDM-150GMS-R11/T-R	15” 450cd/m² XGA LCD Monitor, Aluminum front panel, W/15” touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature,RoHS
TDM-150GMS-USB-R11/T-R	15” 450cd/m² XGA LCD monitor, Aluminum front panel, W/15” USB touch screen, 9~36V input DC input, -30ºC ~ +70ºC operating temperature,RoHS

SRM-121/150

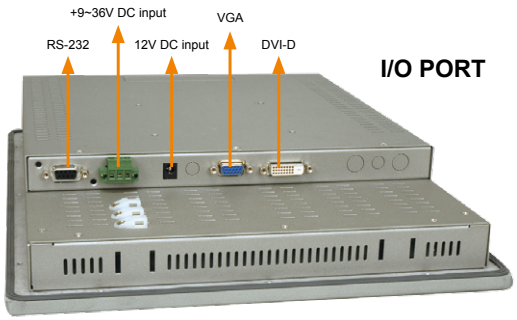
12.1"/15" Sunlight Readable TFT LCD Monitor

Fanless

SRM Series

With Auto-Dimming Function

Super High Brightess | Auto-Dimming | Anti-Reflection | Wide Temperature | IP65 | smart OSD



I/O PORT

Open Frame

SRM-KIT Series

Prolongable OSD Cable with Auto-Dimming Function

Super High Brightess | Auto-Dimming | Anti-Reflection | Wide Temperature | smart OSD | New 9-36V DC Input

Features

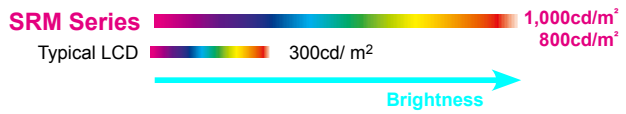
1. 800 and 1000nits Super high brightness
2. Superior Fanless Design
3. 12.1" anti-reflection technology reduces light reflection and high transmission rate to prevent light loss or distortion
4. Adjustable auto-dimming function
5. Wide Operating Temperature:-10ºC~+60ºC
6. OSD lock secures your settings
7. IEI patent software OSD support

Specifications

Model	SRM-121GS SRM-KIT121G	SRM-121XA SRM-KIT121XA	SRM-150GS SRM-KIT150G
LCD Size	12.1"	12.1"	15"
Max Resolution (H x V)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)
Brightness (cd/m²)	1000	1000	800
Contrast Ratio	700:1	700:1	600:1
Display Color	262k	262k	262k
View Angle (H/V)	130°/120°	120°/120°	150°/110°
Pixel Pitch (mm)	0.3075	0.240	0.297
Operating Temperature	-10°C ~ +60°C		
Storage Temperature	-20°C ~ +70°C		
Lamp Life Time	50000hrs		
Input Interface	Analog VGA , DVI-D		
Front Frame	Aluminum		
Chassis	Heavy-duty Steel		
OSD Function	Yes		
Smart OSD	Yes		
Input Voltage	+ 9 ~ +36VDC (Optional for G Model)		
	+12VDC		
Mounting	Wall/Panel/Rack/Arm/Stand		
	Rack		
Front Panel Protection	IP65 Compliant		
	N/A		
Power Consumption	25W		30W
Net Weight	3.3kgs		6kgs
Dimension (W x H x D mm)	340 x 260 x 58		410 x 309 x 65.2
	316 x 224.4 x 47.9		364.1 x 262.5 x 46

Super High Brightness

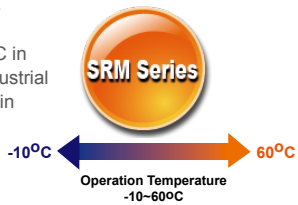
Typical high brightness monitors usually have more than six CCFLs, but the IEI SRM monitors have super high brightness with only four CCFLs. IEI SRM panels are still readable in bright sunlight with fewer backlights and thereby not increasing power consumption or producing extra heat.



Wide Temperature Range

Extended IEI environment testing is performed to ensure the SRM series continue to function properly over its entire services life in a wide working temperature range of -10°C to +60°C in order to accommodate a diverse industrial applications such as outdoor kiosks in winter and summer.

Conventional Operation: 0ºC~50ºC



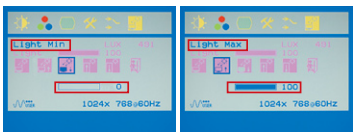
Superior fanless design and low power consumption

SRM models are fanless and therefore use less power and are more silent than conventional high brightness monitors that generally use several high-speed cooling fans. SRM models use between 25W and 30W of power compared to the 40W to 50W used by conventional high-brightness monitors

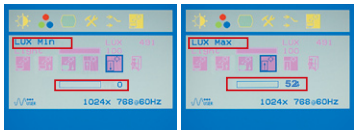
Innovative Auto-Dimming Function

IEI SRM series with auto-dimming functioin can adjust brightness according to ambient light, so that SRM series can job properly under different lamp house average, and outdoor environment. This function not only saves unnecessarybrightness that strains eyes strained and makes you tire but also saves energy saving. The SRM series auto-dimming default settings can be easily customized with the OSD menu to suit any environment.

Adjustable Backlight



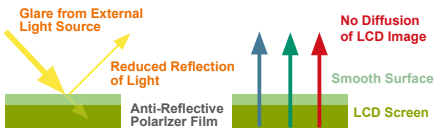
Adjustable Ambient Brightness



Anti-Reflection Technology SRM-121GS

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The SRM-121GS has special AR (anti-reflection) surface treatment to prevent reflection, ensuring excellent visibility in daylight conditions.

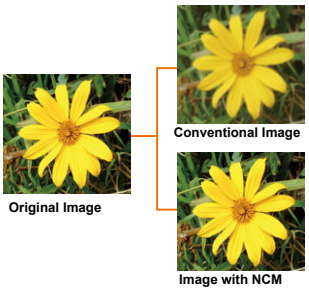
How does Anti-Reflection Surface work?



- Reduces intensity of reflected light
- Higher contrast
- Colors are more vibrant
- No image distortion

Natural Color Matrix (NCM) Technology

POS terminals and kiosks often display advertisements and colorful images, the colors of which must remain vivid and faithful to the original. The IEI SRM monitor with NCM optimization technology prevents this difference by separating color data and luminance components while controlling individual display colors for optimized performance.



12.1" XGA High Resolution

SRM-121XA series supports higher resolutions and smaller pixel pitches (0.24mm versus 0.24mm) to deliever great displays. Higher resolution of a high-density display allows more viewable content so that the user does not have to scroll as much to view the entire spreadsheet.

12.1" SVGA Screen Capture **12.1" XGA Screen Capture**

XGA Higher Resolution

- Present vivid and fine display quality
- Increase viewable content

Ordering Information

• 12.1" SVGA SRM Series

	Model	Description
12V DC	SRM-121GS-R11/T-R	12.1" 1000cd/m² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" Touch Screen, RoHS
	SRM-121GS-USB-R11/T-R	12.1" 1000cd/m² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/12.1" USB Touch Screen, RoHS
9~36V DC	SRM-121GMS-R11/T-R	12.1" 1000cd/m² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input , w/12.1" Touch Screen, RoHS
	SRM-121GMS-USB-R11/T-R	12.1" 1000cd/m² Sun Readable SVGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input, w/12.1" USB Touch Screen, RoHS

• 12.1" XGA SRM Series

	Model	Description
12V DC	SRM-121XA-R10/T-R	12.1" 1000cd/m² Sun Readable XGA LCD Monitor,Aluminum Front Panel,Silver Color,w/VGA and DVI-D input, w/12.1" Touch Screen, RoHS
	SRM-121XA-USB-R10/T-R	12.1" 1000cd/m² Sun Readable XGA LCD Monitor,Aluminum Front Panel,Silver Color,w/VGA and DVI-D input, w/12.1" USB Touch Screen, RoHS
9~36V DC	SRM-121XMA-R10/T-R	12.1" 1000cd/m² Sun Readable XGA LCD Monitor,Aluminum Front Panel,Silver Color,w/VGA and DVI-D input,w/9~36V DC input, w/12.1" Touch Screen, RoHS
	SRM-121XMA-USB-R10/T-R	12.1" 1000cd/m² Sun Readable XGA LCD Monitor,Aluminum Front Panel,Silver Color,w/VGA and DVI-D input,w/9~36V DC input, /12.1" USB Touch Screen, RoHS

• 15" XGA SRM Series

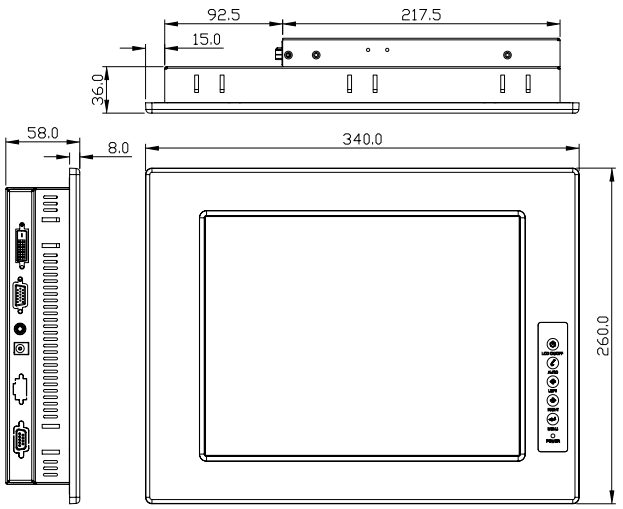
	Model	Description
12V DC	SRM-150GS-R11/T-R	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/15" Touch Screen, RoHS
	SRM-150GS-USB-R11/T-R	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/15" USB Touch Screen, RoHS
9~36V DC	SRM-150GMS-R11/T-R	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input , w/15" Touch Screen, RoHS
	SRM-150GMS-USB-R11/T-R	15" 800cd/m² Sun Readable XGA LCD Monitor, Aluminum Front Panel, Silver Color, w/VGA and DVI-D input, w/9~36V DC input , w/15" USB Touch Screen, RoHS

• 12.1"/15" SRM-KIT Series

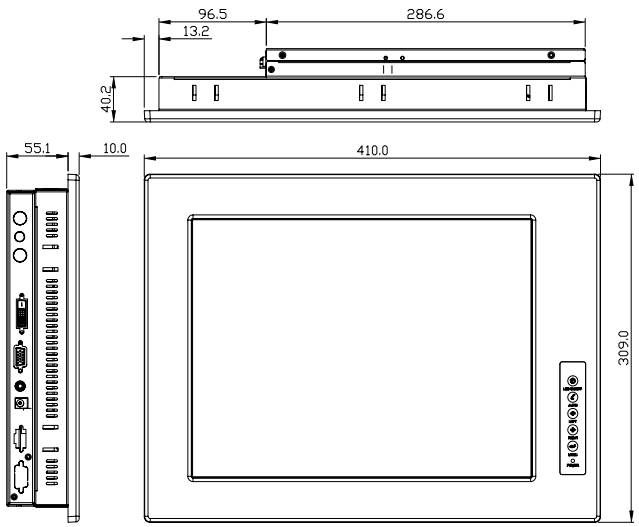
	Model	Description
12V DC	SRM-KIT121G-R11	12.1" 1000 cd/m² Sun Rdadable SVGA TFT LCD kit, VGA and DVI-D input, RoHS
	SRM-KIT121XA-R10	12.1" 1000 cd/m² Sun Rdadable XGA TFT LCD kit,VGA and DVI-D input, RoHS
	SRM-KIT150G-R11	15" 800 cd/m² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, RoHS
9~36V DC	SRM-KIT121GM-R10	12.1" 1000 cd/m² Sun Readable SVGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
	SRM-KIT121XMA-R10	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
	SRM-KIT150GM-R10	15" 800 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS

Dimensions (Unit: mm)

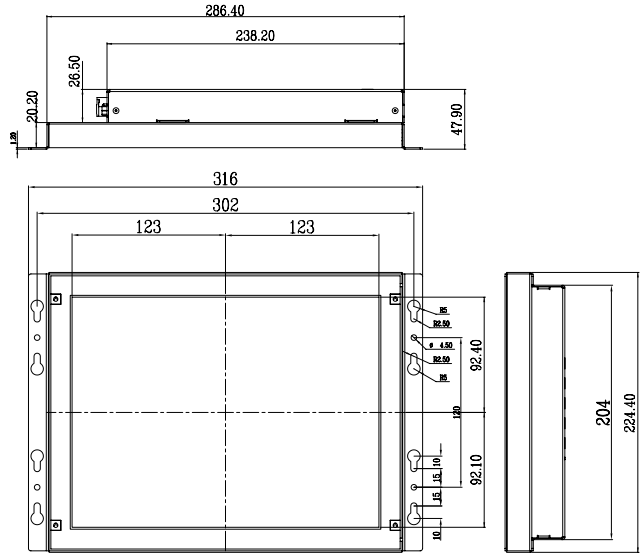
• SRM-121GS



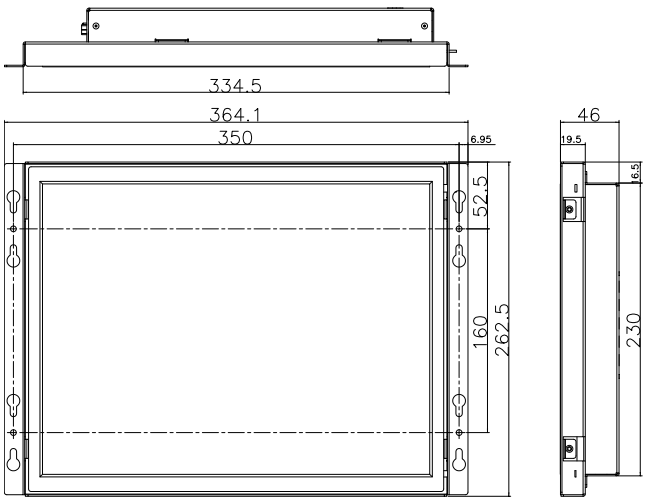
• SRM-KIT121G



• SRM-150GS



• SRM-KIT150G



Packing List

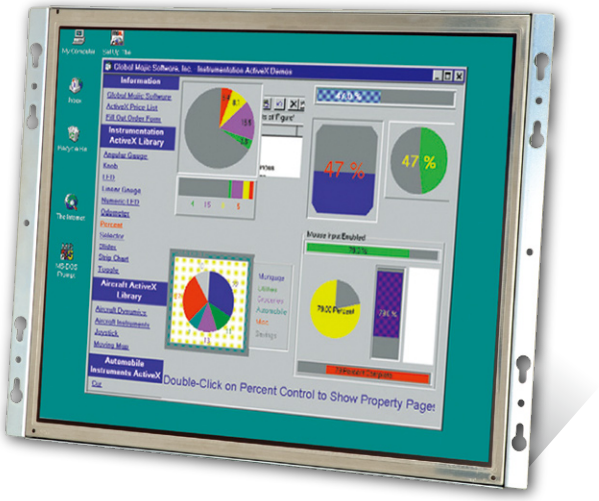
Description	Part Number	Specification
Power Cord	32000-000002-RS	1750mm (EU or US, Which type of cord is shipped depends on the contry)
VGA Cable	32000-036200-RS	1800mm
45W Power Adapter	63000-UP0451E12P81L-RS	1800mm
POWER CABLE	32100-041001-RS	400mm (For SRM M Models)
	32000-123800-RS	400mm (For SRM-KIT M Models)
DVI Cable	32000-086600-RS	1800mm (For SRM Models)
RS-232 Cable for Touch	32000-000098-RS	(For SRM RS-232 Touch Models)
USB Cable for Touch	32000-045801-RS	(For SRM USB Touch Models)
Touch Kit/Touch Pen		(For SRM Touch Screen Models)
User's Manual CD-ROM		

Mounting Kits Information

	SRM-121GS	SRM-150GS
Panel Mount Kit	PK-170M	
Wall Mount Kit	WK-190MS-R10	
Rack Mount Kit	RK-121MS-R10	RK-150MS-R10
LCD Monitor Arm	ARM-11	ARM-31
LCD Monitor Stand	STAND-100-RS	STAND-210-RS

LCD Kits Series

6.5” ~ 19” Open Frame LCD Monitor with OSD Function



Sunlight Readable Available

Features

1. 6.5"~19" modular architecture for efficient integration
2. Over 300cd/m² high brightness and 50000hrs MTFB long lifetime panel
3. Analog VGA or digital DVI interfaces support most of general systems
4. Sunlight readable option
5. Support software OSD for remote control applictions

smart OSD

Specifications

Note: The smartOSD function is supported by revision 11 models and above

Model	LCD-KIT65GH	LCD-KIT084GH	LCD-KIT104GH	LCD-KIT121G LCD-KIT121GX	LCDE-KIT150G	LCD-KIT170G	LCD-KIT190G	SRM-KIT121G SRM-KIT121XA	SRM-KIT150G
LCD TYPE	6.5" TFT	8.4" TFT	10.4" TFT	12.1" TFT	15" TFT	17" TFT	19" TFT	12.1"TFT	15"TFT
Input Interface	VGA	VGA	VGA	VGA	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D	VGA+DVI-D
Max Resolution	640 x 480 (VGA)	800 x 600 (SVGA)	800 x 600 (SVGA)	800 x 600 (SVGA) 1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	800 x 600 (SVGA) 1024 x 768 (XGA)	1024 x 768 (XGA)
Backlight MTBF	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs	50000Hrs
Contrast	450:1	450:1	500:1	500:1 / 700:1	400:1	500:1	700:1	700:1	600:1
LCD Color	262K	262K	262K	262K	262K	16.2M	16.2M	*Sunlight Readable* 262k	*Sunlight Readable* 262k
Brightness (cd/m²)	500 (High Luminance)	400 (High Luminance)	400 (High Luminance)	400 450 (High Luminance)	350	300	300	1000	800
AD BOARD	AV-9350	AV-5350	AV-5350	AV-5300	AV-5300	AV-5300	AV-5300	AV-5300	AV-5300
Adapter (12VDC output to LCD kit)	36W 63000-FSP0361AD101C-RS			45W 63000-UP0451E12P81L-RS					
Chassis	Heavy-duty steel								
View Angle (H/V)	140°/120°	120°/100°	120°/100°	140/°100° 160°/160°	120°/100°	140°/130°	140°/130°	130°/120° 120°/120°	150°/110°
OSD function	Yes								
Smart OSD	Yes								
Mounting	Panel								
Dimenson (W)X(H)X(D) (mm)	203.4 x 121 x 34	234 x 147 x 35.3	242.2 x 209 x 33.6	294 x 240.7 x 42	364.1 x 262.5 x 41.9	390.4 x 300 x 46.9	427.9 x 327.4 x 48.4	316 x 224.4 x 47.9	364.1 x 262.5 x 46
Operation Temperature (°C)	0°C ~ 50°C							-10°C ~ +60°C	

Ordering Information

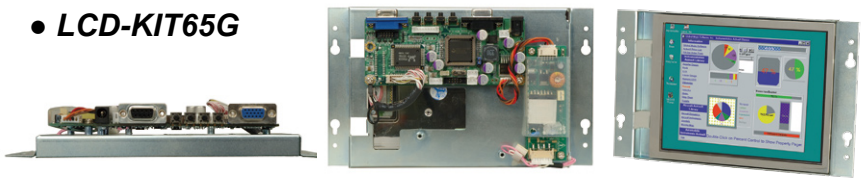
Note: The smartOSD function is supported by revision 11 models and above

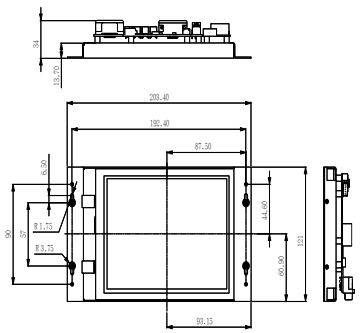
Part No.		Description
6.5”	LCD-KIT65GH	6.5" 500cd/m² High Luminance VGA TFT LCD kit, VGA input, RoHS
8.4”	LCD-KIT084GH-R12	8.4" 400cd/m² High Luminance SVGA TFT LCD kit, VGA input, RoHS
	LCD-KIT084GHM-R12	8.4" 400cd/m² High Luminance SVGA TFT LCD kit, VGA input, 9~36 V DC input, RoHS
10.4”	LCD-KIT104GH-R12	10.4" 400cd/m² High Luminance SVGA TFT LCD kit, VGA input, RoHS
	LCD-KIT104GHM-R12	10.4" 400cd/m² High Luminance SVGA TFT LCD kit, VGA input, 9~36 V DC input, RoHS
12.1”	LCD-KIT121G-R11	12.1" 400cd/m² SVGA TFT LCD kit, VGA and DVI-D input, RoHS
	LCD-KIT121GM-R11	12.1" 400cd/m² SVGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
	LCD-KIT121GX-R11	12.1" 450cd/m² XGA TFT LCD kit, VGA and DVI-D input, RoHS
	LCD-KIT121GXM-R11	12.1" 450cd/m² XGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
	SRM-KIT121G-R11	12.1" 1000 cd/m² Sun Rdadable SVGA TFT LCD kit, VGA and DVI-D input, RoHS
	SRM-KIT121XA-R10	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, RoHS
	SRM-KIT121XMA-R10	12.1" 1000 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
	SRM-KIT121GM-R10	12.1" 1000 cd/m² Sun Readable SVGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
15”	LCD-KIT150G-R11	15" 350cd/m² XGA TFT LCD kit, VGA and DVI-D input, RoHS
	LCD-KIT150GM-R11	15" 350cd/m² XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
	SRM-KIT150G-R11	15" 800 cd/m² Sun Rdadable XGA TFT LCD kit, VGA and DVI-D input, RoHS
	SRM-KIT150GM-R10	15" 800 cd/m² Sun Readable XGA TFT LCD kit, VGA and DVI-D input, w/9-36V DC input, RoHS
17”	LCD-KIT170G-R11	17" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, RoHS
	LCD-KIT170GM-R11	17" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS
19”	LCD-KIT190G-R11	19" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, RoHS
	LCD-KIT190GM-R11	19" 300cd/m² SXGA TFT LCD kit, VGA and DVI-D input, 9~36 V DC input, RoHS

Dimensions (Unit: mm)

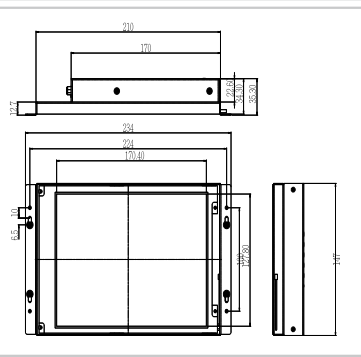
Remark: All the 9~36V DC input models are built to order.

- ***LCD-KIT65G***

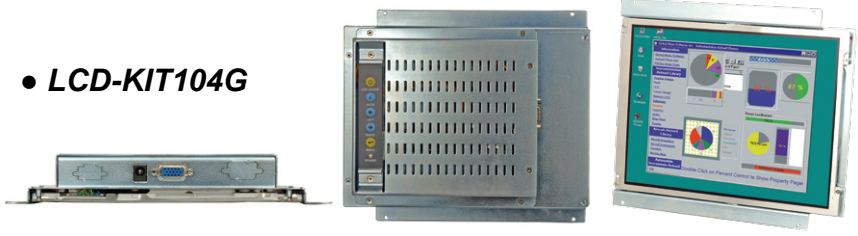


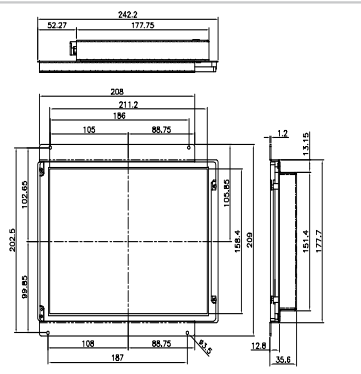


- ***LCD-KIT08G***

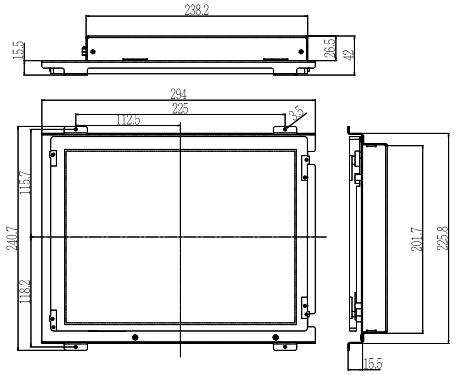


- ***LCD-KIT104G***

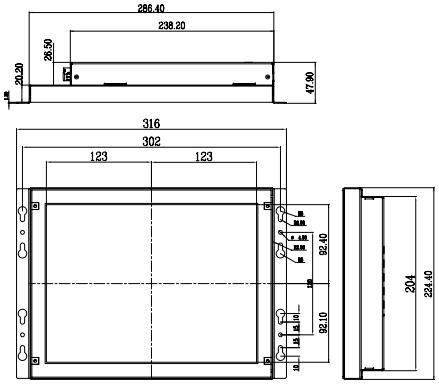




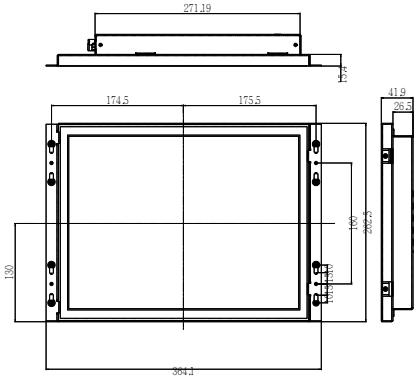
• LCD-KIT121G



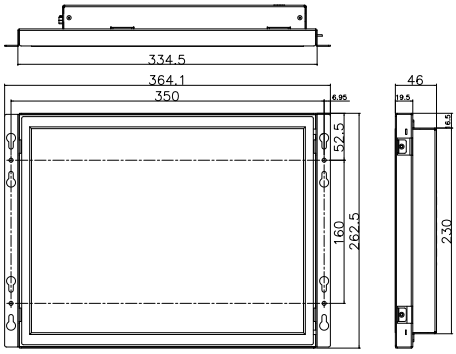
• SRM-KIT65G



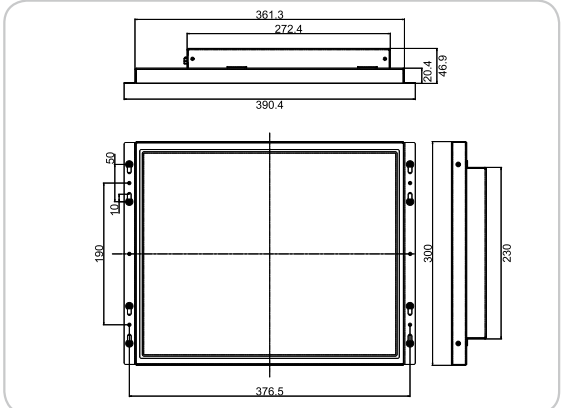
• LCD-KIT150G



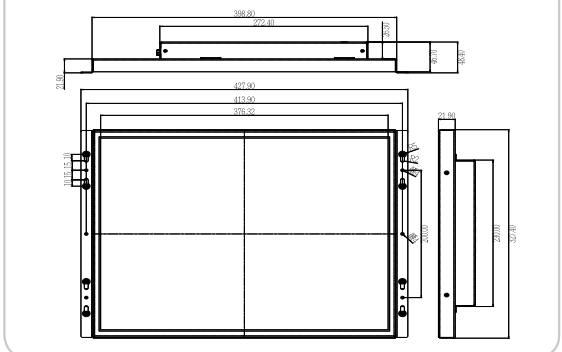
• SRM-KIT150G



• LCD-KIT170G

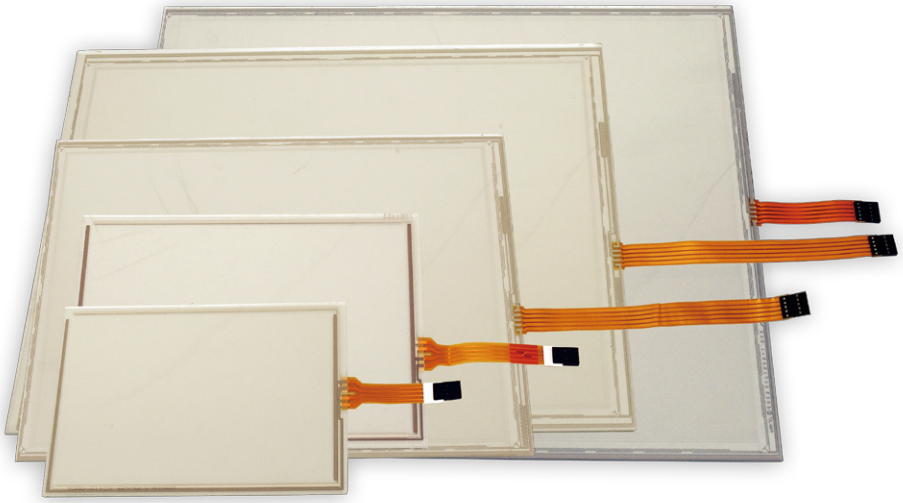


• LCD-KIT190G



Touch Screen Series

6.5” ~ 19” Resistive LCD Touch Screen Kits



Features

1. Optical clarity: Total transmission 78 % or more
2. Input through a special stylus or finger 100g or less.
3. High reliability and durability in the field

Packing List

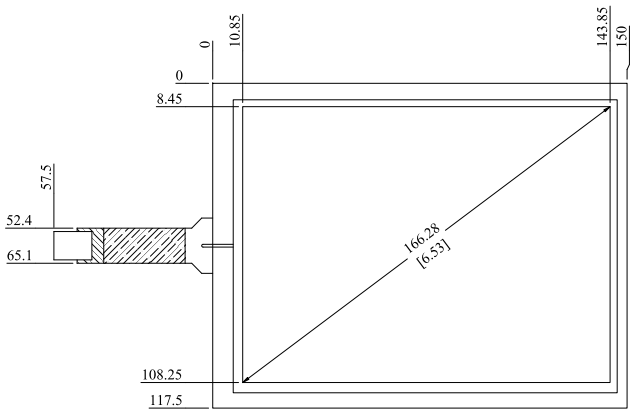
1 x Touch screen
1 x Controller board
1 x Touch cable
1 x Touch driver on CD-ROM
1 x RS-232 / USB cable

Ordering Information

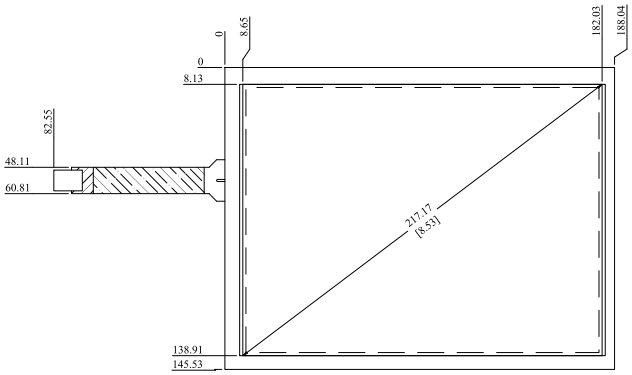
Touch Screen Kit		IEI Products	Sensor
RS-232	USB		
T-R065G	T-R065G-USB	DM-65GS, LCD-KIT65G	4-Wire
T-R084G	T-R084G-USB	DM-84GS,ISDM-84G, LCD-KIT84G	4-Wire
T-R104G	T-R104G-USB	DM-104GS,ISDM-104G, LCD-KIT104G	5-Wire
T-R121G	T-R121G-USB	DM-121GS,ISDM-121G, LCD-KIT121G	5-Wire
T-R150G	T-R150G-USB	DM-150GS,ISDM-150G, LCD-KIT150G	5-Wire
T-R170G	T-R170G-USB	DM-170GS,ISDM-170G, LCD-KIT170G	5-Wire
T-R190G	T-R190G-USB	DM-190GS,ISDM-190G, LCD-KIT190G	5-Wire

Dimensions (Unit: mm)

- *T-R065G*

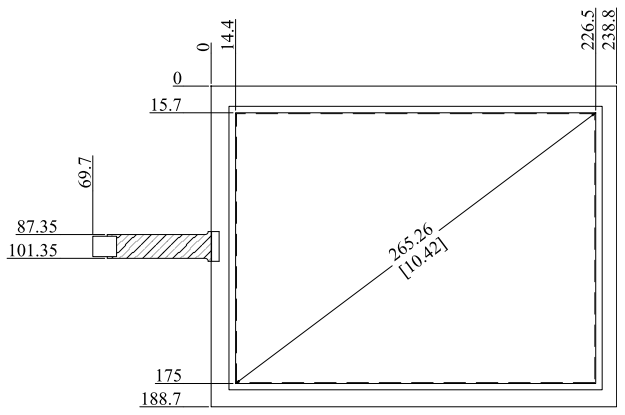


- *T-R084G*

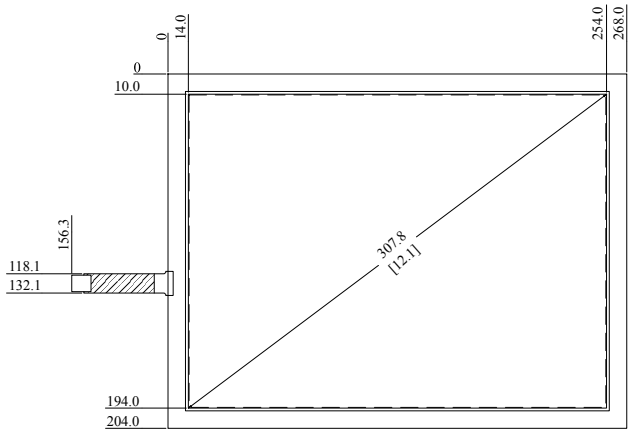


Dimensions (Unit: mm)

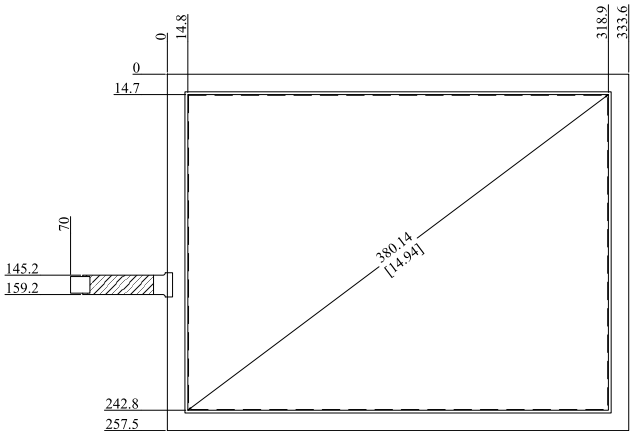
• T-R104G



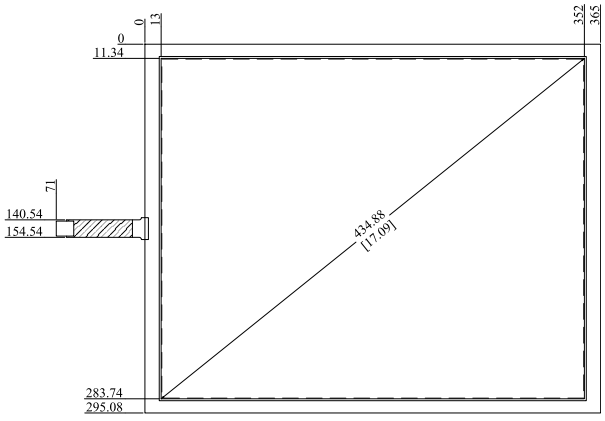
• T-R121G



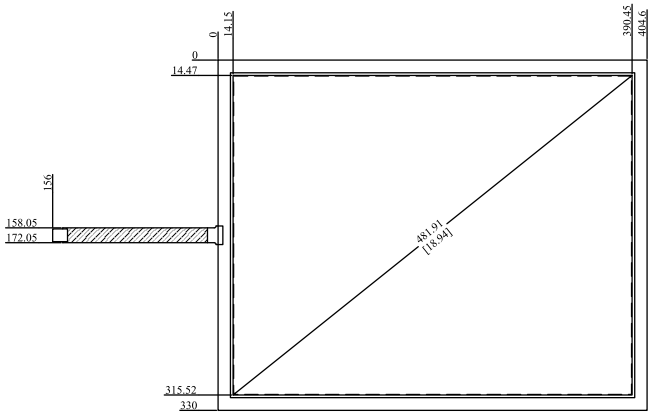
• T-R150G

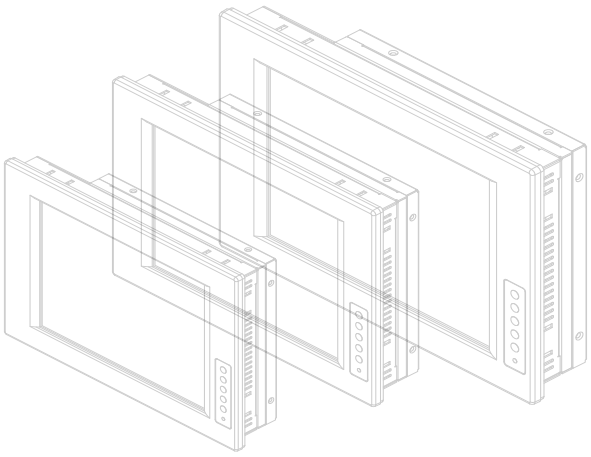


• T-R170G



• T-R190G





ALOHA-12A

Wide 12.1" All-in-One Display Console

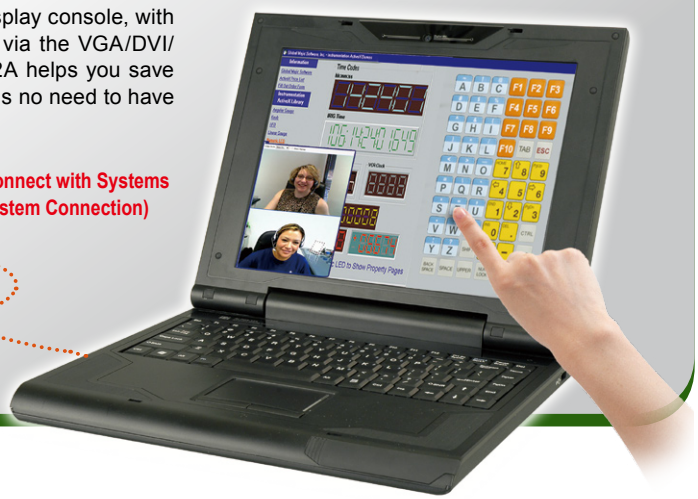
Display Console Solutions

The ALOHA all-in-one display console is the world's first 7-in-1 display console, with a 12.1" touch control unit that allows access to single computer via the VGA/DVI/ USB KVMA (keyboard, video, mouse, audio) console. ALOHA-12A helps you save hundreds of dollars in equipment, space, and power costs. There is no need to have additional peripherals for the system.

Easily to Connect with Systems (or Easy System Connection)

Embedded System
IBX-530-N270

ALOHA-12A



Features

- Portable Compact Design
- 7-in-1 Display Console
  1. 10.4" Widescreen (16:9) TFT LCD /12.1" TFT LCD with resistive touch screen (Touch Optional)
  2. 87-keys Keyboard and TouchPad
  3. 300K pixel camera allows to take photos and live video communication
  4. Digital microphone
  5. Embedded two 1.5W speakers can support alarm warning notice or audio application
  6. 5 USB ports built in allow many USB devices to be connected
  7. Earphone jack for private listening
- 3 Easy Cable Installation
  1. USB on a single cable supports 7 functions
  2. Analog VGA and digital DVI interface support most of general system
  3. Lockable power adapter
- Convenient OSD settings by cap-sensor
- Hot Pluggable- Add or remove computer without having to power down the switch
- Standard support of English version keyboard Optional Japanese, German, French, Italian version keyboard support.

• Camera with Digital Microphone

• Convenient on-screen display (OSD) menus controlled by cap-sensor

Ruggedized Die-casting base !
Two 1.5W Integrated Speakers

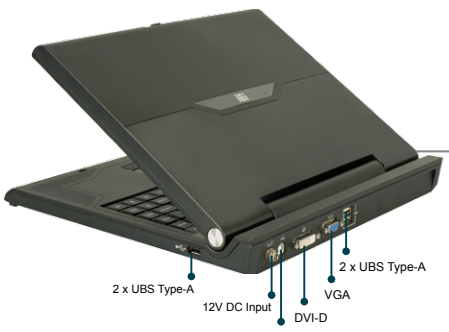
• Touchpad

• Multiple USB Connectivity

The ALOHA-12A could be a 5-port USB 2.0 hub which optimizes the use of the single USB port by splitting it into five additional USB 2.0 ports (two on the front, one on the side and two on the rear) for multiple USB devices.

Diagram

ALOHA-12A help you save hundreds of dollars in equipment, space, and power costs. There is no needs to have additional peripherals for the system.



3 Cables Easy Installation!

7-in-1 Integrated Functions!

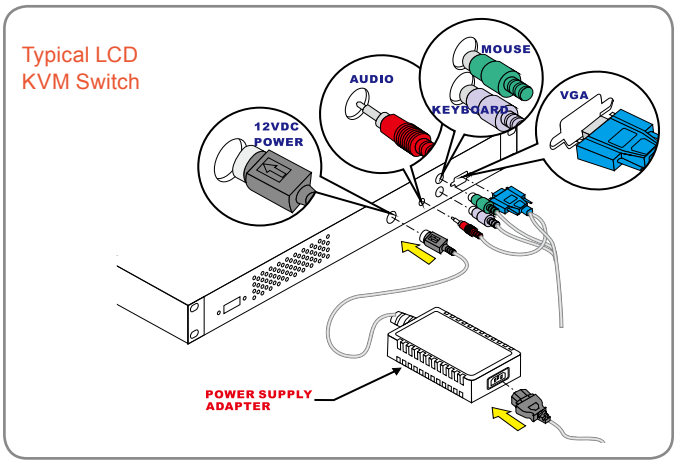
1. Touch Screen
2. Camera and Digital Microphone
3. Earphone
4. Speakers
5. Keyboard
6. Touchpad
7. LCD Monitor

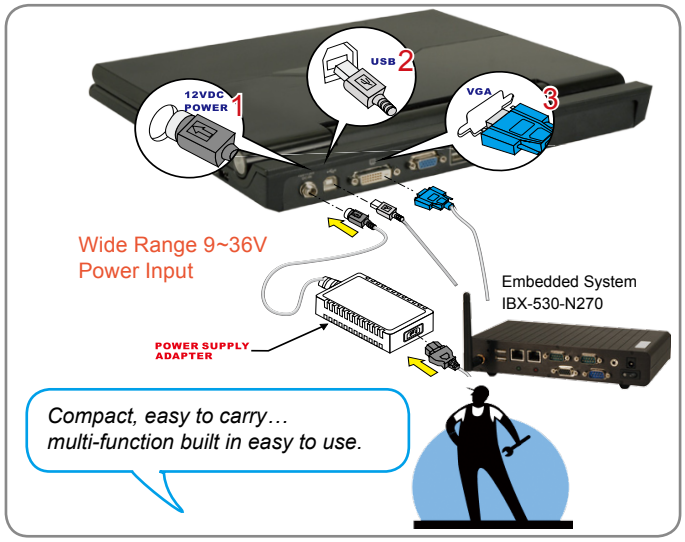
Application

Repair Maintenance Tool

General maintenance and repair workers often carry out several different tasks in a single day, at any number of locations. The compact all-in-one console allows the workers to carry it comfortably, to do the system maintenance, especially to those embedded systems which are difficult to dismantle.

Easy wiring via VGA / DVI and USB cables decreases the installation time!

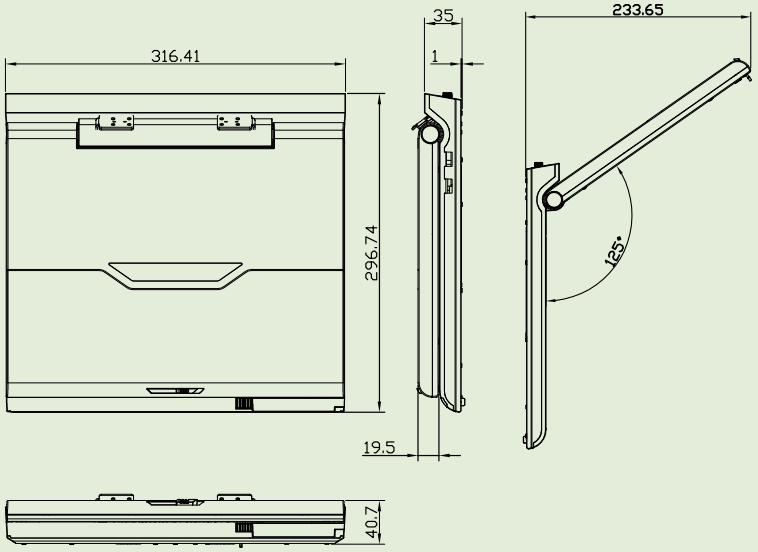




Install Anywhere with Adjustable FLAT VESA ARM!

Robust Die-casting Base

ALOHA-12A Dimensions (Unit: mm)



Specifications

Model		ALOHA-12A
Display	LCD Size	12.1”
	Resolution	1024 x 768 (XGA)
	Brightness (cd/m²)	400
	Contrast Ratio	500: 1
	LCD Colors	262 k
	Viewing Angle (H-V)	160º/160º
Connectors	Rear	1 x USB Type-B Input
		1 x DVI-D
		1 x VGA
		2 x USB Type-A
	Front Panel	1 x Microphone jack
		1 x Speaker jack
		2 x USB type-A
	Side	1 x USB type-A
Touch Panel		Optional
Camera and Microphone		300K pixel with digital microphone
Speakers		AMP 1.5W +AMP 1.5W
OSD Control		On-screen display (OSD) controlled by cap-sensor
Power Input		9V~36V
Environment	Operating Temperature	0~45°C
	Humidity	5%~95%RH
Physical Properties	Housing	Metal
	Weight	3.16 kg
	Dimensions (L x W x H) (mm)	316.41 x 296.74 x 40.7

Ordering Information

Model	Description
ALOHA-12A- [L] /T-R-R20	12.1" Advanced All-in-one touch display console, black color
ALOHA-12A- [L] -R20	12.1" Advanced All-in-one display console, black color

[L] Language Code-

I :Italian F :French T :Traditional Chinese E :English
S :Spanish J :Japanese R :Russian G :German

Packing List

Item	P/N	Description
USB cable	32000-091700-RS	USB A type male and USB B type male (length: 1.8M)
VGA cable	32000-036200-RS	D-SUB 15P male (length: 1.8M)
Power adapter	63000-FSP0401ADF03A821-RS	90V~264V;12V;40W (length: 1.5M)
Power cord	32000-000002-RS	European power cord (length: 183cm)
Touch pen	XTR104-0002-RS	
User's manual and touch driver CD-ROM		

Options

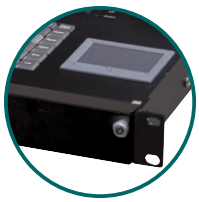
	P/N	Description
DVI	32000-115700-RS	DVI cable (length: 1.8M)
	32000-115800-RS	DVI cable (length: 5M)
	32000-115900-RS	DVI cable (length: 10M)
VGA	32000-036200-RS	VGA cable (length: 1.8M)
	32000-077300-RS	VGA cable (length: 5M)
		VGA cable (length:10M)
USB	32000-091700-RS	USB A type male and USB B type male (length: 1.8M)
	32000-077400-RS	USB A type male and USB B type male (length: 5M)
		USB A type male and USB B type male (length: 10M)

LKM-926G/9268G

15” LCD Monitor/ Keyboard/ Mouse/ Speak/ KVMA switch 5-in-1 1U Height Drawer

No special cables required, up to 8 computers connection !

No special cables required to connect up to 8 computers!
Five functions: LCD monitor, keyboard, mouse, speaker and KVMA switch



LKM-9268G
Two self-clich prevents the keyboard from sliding in shaking

Main Features

1. Outstanding LCD Module : Channel change control, auto scan control, programmable station name.
2. KVMA Switch : 8 port KVMA switch can be manually or automatically set via LCD module
3. Standard support of English version keyboard. Optional Japanese, German, French, Italian version keyboard support.
4. Embedded speaker can support alarm warning notice or audio application
5. Hot Pluggable - Add or remove computers without having to power down the switch

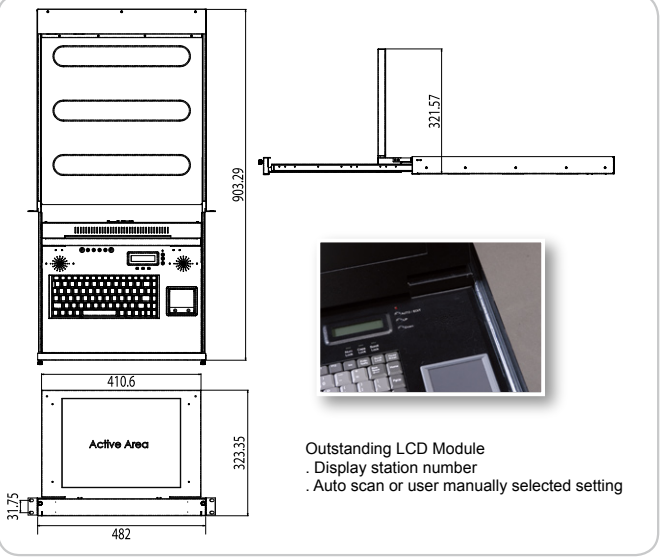
Specifications

1U Height designed to save RACK space	
Computer Connections	LKM-926 series =1, LKM-9268 series = 8
LCD size	15” high brightness TFT LCD
Resolution (H x V)	1024 x 768 (XGA)
Luminance (cd/m²)	350 cd/m²
Display Color	262K
Pixel Pitch (mm)	0.297
Contrast Ratio	400:1
View Angle (H/V)	120/100
LCD MTBF	50000 hrs
Keyboard and Key Pad	88 standard keys with stouch pad supports English, Japanese, German, French, Italian keyboard
Alarm / Audio function	Available via two internal speakers (1W, with audio on/off switch)
OSD	Built-in OSD (On screen display) for user adjustments, including H/V position, color, Size, ...etc
Power Adapter	45W
Color	Standard color are black (Pantone black C) or white (Pantone black 413C)
Vibration	5~17Hz, 0.1” double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak
Shock	10G acceleration peak to peak (11ms)
Temperature	0°C ~ 50°C
Humidity	5-95%, non-condensing
Dimensions (WxHxD mm)	482 x 323.25 x 520
LCM	8 Port KVMA models only

Packing List

- 2 x RACK Mount bracket. spcc (P/N: 41020-009501-00-RS)
- 2 x RACK Mount bracket. spcc (P/N: 41020-009001-01-RS)
- 1 x 1.8M Cable set, include VGA, Keyboard, Mouse, Audio Cable (P/N: LKM-CB18A-RS)
- 1 x Power supply.UP04501E-12P64L.45 watt AC/DC Adapter.90 VAC to 264 VAC, W/core (P/N:63SPU45E201-000-RS)
- 1 x 175cm round cable power cord (P/N: 32000-000002-RS)

Dimensions (Unit: mm)



Outstanding LCD Module
. Display station number
. Auto scan or user manually selected setting

Ordering Information

LKM-926G [C] - [L]	Single Input 15” LCD/Keyboard/Mouse/Speaker 1U drawer includes 1.1M length cable set.AC Input
LKM-926G [C] T - [L]	Single Input 15” LCD/Keyboard/Mouse/Speaker 1U drawer includes 1.1M length cable set. 48VDC input
LKM-926G [C] - [C] - [L]	Single Input 15” LCD/Keyboard/Mouse/Speaker 1U drawer includes1.1M length cable set. 24VDC input
LKM-9268G [C] - [L]	8 input 15” LCD/Keyboard/Mouse/Speaker 1U drawer, AC input
LKM-9268G [C] T - [L]	8 input 15” LCD/Keyboard/Mouse/Speaker 1U drawer, 48VDC input
LKM-9268G [C] - [C] - [L]	8 input 15” LCD/Keyboard/Mouse/Speaker 1U drawer, 24VDC input

[C] Color Code **B**: Black **W**: White
[L] Language Code **EN**: English, **JP**: Japanese, **DE**: German, **FR**: French, **IT**: Italian, **TW**: Traditional Chinese, **SP**: Spanish, **RU**: Russian

Options

LKM-CB18A-RS	1.8M cable set; includes VGA, Keyboard, Mouse and Audio cable.
LKM-CB30A-RS	3.0M cable set; includes VGA, Keyboard, Mouse and Audio cable.
LKM-CB50A-RS	5.0M cable set; includes VGA, Keyboard, Mouse and Audio cable.

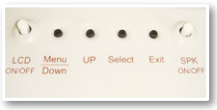
LKM-927G/9278G

17” LCD Monitor/Keyboard/Mouse/Speaker/KVMA switch 5-in-1 1U Height Drawer

LKM-9278GW

LKM-9278GB

No special cables required, up to 8 computers connection !



Convenient OSD Control Buttons

Two internal Speakers with audio on/off switch

Touch pad and two control buttons

Two self-clinch prevents the keyboard from sliding in shaking

Auto-scanning, selecting and editing computer ports by LCD module control buttons

5-in-1 1U height Drawer !
LCD monitor, keyboard, mouse ,speaker and KVMA switch

The LKM-927G and LKM-9278G LCD KVMA control units allow secure access to one or multiple computers from a single KVMA (Keyboard, video, mouse and audio) console in a system rack.

A single LKM-927G or LKM-9278G can control up to 8 computers. The LKM-927G and LKM-9278G both feature 17" LCD monitor and keyboard with built-in touchpad in a 1U rack. The five-in-one space-saving design has either one (LKM-927G) or eight (LKM-9278G) ports to be conveniently installed in 1U system rack.

Specifications

			LKM-927G	LKM-9278G
System Connections			1	8
LCD Specifications	LCD Size		17"	
	Resolution		1280x1024	
	Luminance (cd/m²)		300	
	Display Color		16.7M	
	Viewing Angle (CR=10)		160º/160º	
	Contrast Ratio		800:1	
	LCD MTBF		50000 hrs	
Connectors	KVMA Port	Keyboard	1 x PS/2 (Purple)	8 x PS/2 (Purple)
		Video	1 x HDB-15 Male (Blue)	8 x HDB-15 Male (Blue)
		Mouse	1 x PS/2 (Green)	8 xPS/2 (Green)
		Speaker	1 x ø 3.5 Stereo Plug(Red)	8 x ø 3.5 Stereo Plug(Red)
	Power		1 x IEC-320-C14 Input Inlet	
LCM Adjustment			No	Yes
Computer Port Selection			No	Auto-scan/Pushbutton
Switch	LCD Power		1 x Pushbutton	
	Speaker		1 x Pushbutton	
	LCM Adjustment		No	3 x Pushbutton
Power Consumption			42 W	
Color			Black (PANTONE Black C) or White (PANTONE 413C)	
Environment	Operating Temp.		0~40˚C	
	Humidity		5%~85%RH	
	Shock		10G acceleration peak to peak (11ms)	
	Vibration		5-17Hz, 0.1" double amplitude displacement.17-640Hz, 1.5G acceleration peak to peak.	
Physical Properties	Housing		Metal	
	Weight		17kg	
	Dimensions (L x W x H)		57.2 x 43.3x 4.4 cm (17"/1U)	

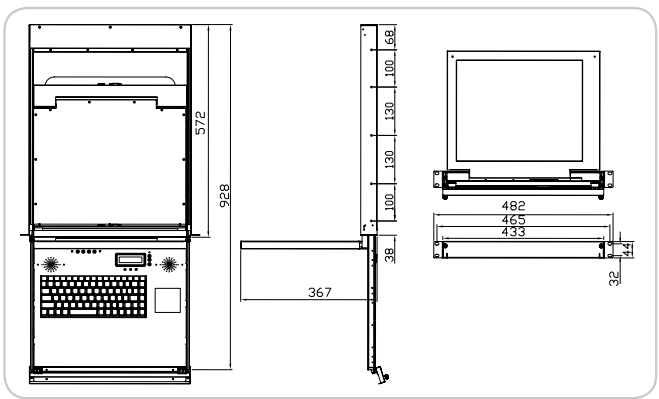
Packing List

Part Number	Description	Amount
41020-009501-00-RS	Rack Mount bracket(Long)	2
41020-009001-01-RS	Rack Mount bracket(Short)	2
LKM-CB18A-RS	1.8M Cable Set	1
32000-000002-RS	18.3 cm round cable power cord	1
19600-000082-RS	Screw Set	1
63SPU45E201-000-RS	AD/DC Power Supply (For AC input Model)	1
63000-ACEN023T-RS	48 VDC/DC Power Supply(For 48VDC input Model)	1
63000-ACEN023C-RS	24 VDC/DC Power Supply(For 24VDC input Model)	1

Features

1. Integrated KVMA console (88 key keyboard and touchpad) with 17” LCD monitor in a 1U rack maximizes space in your control center.
2. Supports up to 1280x1024 resolution
3. Wide viewing angles: 160° wide viewing angle for easy viewing
4. Hot-pluggable capabilities enables the addition or removal of computers without having to power down the switch
5. Multiple languages supported: English, Japanese, German, French, Italian, Traditional Chinese, Spanish, and Russian version keyboard supported.
6. Auto-scan mode: Automatically scan the port with an interval of 10 seconds so that users can monitor their activity automatically. (For LKM-9278G)
7. Editable station name: Allow users to name each computer station on the LCD module to easily manage every station. (For LKM-9278G)
8. Optional DC power input: 48 VDC or 24 VDC power input options for more mobile and server room applications

Dimensions (Unit: mm)



Ordering Information

LKM-927G [C] - [L]	Single input 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, AC input.
LKM-927G [C] T - [L]	Single input 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, 48VDC input.
LKM-927G [C] C - [L]	Single input 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, 24VDC input.
LKM-9278G [C] - [L]	8 inputs 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, AC input.
LKM-9278G [C] T - [L]	8 inputs 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, 48VDC input.
LKM-9278G [C] C - [L]	8 inputs 17" LCD Monitor/Keyboard/Mouse/Speaker 1U Drawer with individual Monitor and Keyboard module, 24VDC input.

Note:

[C] Color Code **B**: Black **W**: White
T: 48VDC power input model
C: 24VDC power input model
[L] Language Code **EN**: English, **JP**: Japanese, **DE**: German, **FR**: French, **IT**: Italian, **TW**: Traditional Chinese, **SP**: Spanish, **RU**: Russian